TQM, THE FEMININE PRINCIPLE, AND SOCIAL CHANGE: THE IMPORTANCE OF PRINCIPLED IMPLEMENTATION

by

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(ABSTRACT)

W. Edwards Deming's management philosophy of continuous improvement, TQM, has gained attention in the public and private sectors as a means of resolving the "crisis" in modern American organizations. TQM's effectiveness is dependent on its principled implementation. As an imbalanced perspective, the hyper-rational masculine conventional management wisdom has thwarted real organizational innovations by limiting methods, techniques, and actions to its frame of assumptions. A radically different set of assumptions or world view, the feminine perspective, is needed to provide balance and to create the possibility of true innovation that can lead to resolution of the crisis faced by American organizations.

Jungian psychoanalytic understanding of psyche structure, development, and the dynamics of repression provide the theoretical framework for understanding the importance of a principled implementation of TQM. This principled implementation will avert an masculine warping of TQM and will provide a means of balance between the

masculine and feminine principles. Critical analysis of documentation and literature reveals clear evidence of TQM's congruence with the feminine principle and its potential for radical change in organizations and society.

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CHAPTER 1

INTRODUCTION

Organizations in Crisis

Modern American public organizations are in a state of crisis. These organizations are faced with a myriad of problems in the work place and in the workforce population: declining worker literacy rates, declining skill level of the workforce, enormous diversity (more women, ethnic and national minorities, blacks, young and older workers), behavioral problems, and increasingly marginal legitimacy. Reflecting these trends, the National Academy of Public Administration has identified six crises facing government: (1) purpose, (2) leadership, (3) competence, (4) legitimacy, (5) accountability, and (6) finance. (Hanson, 1991) Public organizations are experiencing, among others, pressures of declining budgets, increasing citizen demands, privatization, and political gridlock. It is necessary for these public organizations to respond to the pressures and crisis.

Our society and government seem to have inadequately anticipated and adapted to the multiple developments in the organizational world. As a result of an overwhelming belief in narrow instrumentalism, management seems to have refused to acknowledge, accept, or respond to the dramatic changes that have occurred and continue to occur in the work force,

in technology and world markets, and in political systems. While new management and organizational theories have been developed during the period being discussed, the crisis continues and worsens. Though such theories often seem quite different in approach and focus, there is an underlying commonality--they are all grounded in what has come to be referred to as "rationalism."

Rationalism and Conventional Management Wisdom

Rationalism is the belief that conscious calculation is the sole basis of knowledge and action. As the predominant modern paradigm, rationalism propagates a specific pattern of characteristics--separateness, order, control, facts, linearity, means-end analysis, authority over--and is blind to and devalues others. We are just now beginning to understand that these characteristics of the rational paradigm have a fundamental congruency with and indeed spring from the principle of "masculine" consciousness. This gender biased value structure creates a management system in organizational life that is imbalanced and limited. Popular management writers, such as Tom Peters, acknowledge the masculine bias of American organizational life and point out that the future will require a management with a more feminine approach. While there has been development and innovation within management theory, these

innovations have all been simply variations on a central theme set by the masculine, rational perspective. This pattern of change as "plus ca change, plus c'est la meme chose" denies the possibility for true change and innovation, i.e. of the depth and scope required by emerging conditions facing modern organizations.

A wide variety of management techniques based on the conventional wisdom of management or administration have been ineffective in addressing or resolving the problems of organizations. It has been suggested that the reason for this ineffectiveness in the public sector is that management techniques developed in the private sector have been inappropriately applied to the public sector. I suggest, however, that the problem is more fundamental and goes to the underlying cultural paradigm on which management is based. Since the conventional management wisdom and the techniques derived from it are grounded in a predominately masculine world view, the management structures, techniques, and theories developed under this conventional management wisdom can cope only with the world that the masculine view assumes. Yet, the conditions of organizational life have moved far beyond those assumed by the masculine, rational paradigm. This paradigm is unable to comprehend the enormity and rapidity of change, and thus is unable to appropriately respond to the new conditions.

To reckon with and resolve the organizational crisis, management needs a major, fundamental, paradigmatic shift that will include and value the characteristics of perspectives and actions it currently denies. This perspective is the "feminine." Gabon (1989) states that the challenge to modern culture is to open up to new perspectives--especially to the feminine. The resulting shift would not devalue the masculine, but instead would elevate the feminine to equal status. In doing so, the potential for management theory development and truly new and helpful innovation can be realized.

Total Quality Management and the Feminine

In the search for potential catalysts in change, W. Edwards Deming's philosophy of continuous improvement, emerges as a radical innovation in organizational management. Popularly known as Total Quality Management, it is a philosophy that focuses on the transformation of organizations at both the individual and social level through establishing "relationship" between all of the components of the system: internal and external; workers and managers; and the processes they enact and monitor. Feminine characteristics entailed in TQM include: emphasis on relationship, acceptance of variation and diversity, contextual thinking, change, process, system, cooperation and collaboration, and a tentative approach to action and

experience. These are in marked contrast to the masculine characteristics of conventional management wisdom: instrumental relationships, order, hierarchy, stability, linear rationality, competition, definiteness, and abstraction. TQM provides the environment in which the feminine can be brought out in its positive forms, brought into balance with the masculine, and thereby enhance organizational life and effectiveness.

Statement of the Problem

Organizations in Crisis

During the past two decades there has been continuing distrust and disdain of public administration at all levels. This was exemplified by the increased emphasis at the political level on deregulation and privatization that began with the Carter administration's government reorganization for efficiency and effectiveness and continued with the Reagan administration's goal of "getting government off our backs." The public's perception of government has shifted dramatically from the days when it was believed that "government can do anything" (Van Riper 1983) to a time where government is viewed as out of control and unable to do anything, at least to do anything effectively.

How this negative perception has evolved can be

explained in a variety of ways. As previously stated, one explanation is that management principles developed for business have been inappropriately applied to government organizations--the conventional wisdom has been (incorrectly) that private management techniques are universally applicable to the public sector.

I suggest here that there has been parallel development of management theory, application, and performance in both the private and public sectors. We have moved from the days of high performance and high expectations to the current crisis of poor performance and lowered expectations. In the private sector this movement can be seen in the growth, maturity, and then decline of our domestic industrial economy. We have moved from the position of world leader to that of a struggling giant who no longer has the capability or will to function at previous levels. In the public sector, the transition has occurred in parallel. Just as the productive capacity of the U.S. expanded in the early twentieth century, so did its administrative capacity. The government became involved in reversing the depression of the 1930s, supporting the war effort and rebuilding in the 1940s, exploring space in the 1950s and 60s, and attacking major social problems of poverty and education in the 1960s. As a reflection of this responsiveness, the perception that "government can do anything" became a conventional belief.

Ultimately this perception was stripped away by the failures of Viet Nam, the Great Society, economic recession, and decline of the U.S. position in the international economic community.

Many management tools and technologies have been applied to the emerging problems and trends in both the public and private sectors. The list of budgeting techniques and processes seem endless (program budgeting, ppbs, zero based budgeting, privatization). The systems approach, MBO, and performance based appraisal are just a few of the management techniques invented in hope of reversing the trend of decline. The constant creation of new approaches reflects the assumption that we are not using the correct techniques, or that in the public sector, we are using private sector methods inappropriately. Again, I posit that the issue is more fundamental: the dominant, rational, "masculine" world view is limited in its assumptions and values, and thus, is incapable of responding to modern organizational conditions. A new paradigm is required to respond to the rapidly changing, diverse modern organizational environment.

A New Paradigm

The practical importance of the feminine is reflected in the findings of the Hudson Institute's WORKFORCE 2000.

As we approach the 21st century, the workforce and the work environment will be profoundly different from that of the 20th century. The workforce will: (1) be older with fewer young workers entering the labor market; (2) have a significantly higher percentage of females; (3) have a higher percentage of minorities--Blacks, Hispanics, Asians, Irish, etc.; and (4) have educational deficiencies, particularly among young workers. Work will be: (1) more information based; (2) more technology based; (3) more service oriented; and (4) less manufacturing oriented. Public organizations will: (1) be flatter; and (2) will experience changes in their goals as budgets change, new administrations are elected to office, interest groups exert influence, and current issues are reprioritized in importance. These characteristics of the workforce and work environment suggest that flexibility and adaptability are necessary for survival. Yet these are not the characteristics of the management practices and theories of today. The continued reliance on such limited approaches will further exacerbate the decline of organizations in the complex, diverse future. An example of this situation is the current problem of sexual harassment. Faced with increasing numbers of sexual harassment charges, organizations have struggled to develop a rational, or rule-based definition that can be applied systematically. The

notion that sexual harassment is determined by the victim has been the source of much confusion, especially for males, and exemplifies the nature of alternative "ways of knowing." Diverse organizations require a flexibility that provides contextual understanding in which a variety of individuals may have varying "ways of knowing."

In W. Edwards Deming's (1986) book, OUT OF THE CRISIS, he explains the transformation that must take place in order for American business and government to regain its vitality and viability.

> Solving problems, big problems and little problems, will not halt the decline of American industry, nor will expansion in use of computers, gadgets, and robotic machinery. Benefits from massive expansion of new machinery also constitute a vain hope. Massive immediate expansion in the teaching of statistical methods to production workers is not the answer either, nor wholesale flashes of quality control circles (QC-Circles). All these activities make their contribution, but they only prolong the life of the patient; they can not halt the decline. Only transformation of the American style of management, and of governmental relations with industry, can halt the decline and give American industry a chance to lead the world again.(Deming 1986, x)

This philosophy has become known popularly as Total Quality Management (TQM). It is not a new management technique, but a new philosophy that, upon more intensive analysis, has an essentially "feminine" grounding, which is fundamentally different from the traditionally masculine rational approaches. Thus it contains the potential for

fundamentally new and more balanced approaches to our problems. The philosophy is based on Dr. Deming's education and experience in statistical analysis and his perception of the importance of the interdependence of systems. While Deming's work has no explicit connection to the theory of the feminine, his fundamental beliefs in cooperation and relationship, beliefs that pervade his theory, are distinctively indicative of its grounding in the feminine principle.

If we look at the characteristics of the workforce and work environment of the 21st century, the old order seems grossly inadequate. The highly feminine nature of TQM offers the philosophical grounding to meet the challenge of the new world order. If the underlying congruence of the feminine principle and TQM is disclosed, the energy and potential for transformation might not be lost. First, by elucidating the feminine identification we will avoid the pressure toward illegitimately molding TQM into a modified form that is consistent with traditional management theory. Second, we will avoid the prevalent, neutralizing attitude that TQM is just another management "flavor of the month." Third, we will relieve the twisting and warping that has occurred in women and men in organizational life that is due to the repression of the feminine theme; since both genders participate in the feminine principle, both are impaired by

its repression. Thereby, we will avoid the continued collapsing of our public organizations and the impairment of their ability to serve the public interest.

Overview of the Dissertation

To facilitate the development of these themes, the following narrative structure has been used. Chapter 1, this chapter has set the context by generally describing the problems facing modern organizations and highlighting the importance of a different management paradigm for meeting the challenges of modern public organizations. Chapter 2 reviews the principle literature of Deming's continuous improvement philosophy and describes the analytical strategy used in this project. The literature review establishes the contribution that the present study seeks to make. The review reveals that the grounding of TQM in the feminine principle has not yet been adequately described in the TQM literature. After reviewing the literature of Deming's management philosophy, Pitirim Sorokin's logico-meaningful method will be described as the methodological framework for the analysis of the underlying congruencies between the feminine principle and TQM, and incongruencies between the masculine principle and TQM. Chapter 3 provides the theoretical framework needed for understanding the concept of the masculine and feminine principles. Chapter 4

analyzes conventional or traditional management literature so as to show its congruence with the masculine gender principle. Chapter 5 analyzes the TQM literature so as to demonstrate its incongruence with the masculine gender principle, and congruence with the feminine gender principle. Chapter 6 concludes the dissertation by making the case that TQM provides a new, gender balanced management paradigm. Through elucidating the feminine grounding of Deming's philosophy, TQM can be recognized as a fundamentally different management philosophy that has the potential for meeting the challenges of modern public organizations.

CHAPTER 2

LITERATURE REVIEW AND METHODOLOGICAL STRATEGY

Literature Review

Introduction

This chapter provides an overview of the literature of W. Edwards Deming's continuous quality improvement philosophy. The quality improvement literature includes historical, descriptive, and inspirational components. Each of these components has played an important role in an understanding of the TQM philosophy, and each is treated in a separate section of the chapter. Briefly, the historical literature describes the development of the quality movement in both the U.S. and Japan from the early 1900s to the 1990s. (Deming 1982; Feigenbaum 1983; Gabor 1988; Garvin 1988; Hooper 1982, 1985) This literature focuses on the development of techniques, managerial interest in quality, and corollary improvements and advances in organizational performance. The descriptive literature focuses on the principles, techniques, and tools used in quality management. (Deming 1982, 1986; Carr and Littman 1990, Feigenbaum 1991, Scherkenbach 1990, 1991; Shewhart 1931) The development of techniques and methodology are traced in this chapter from the early statistical work of Shewhart to

the contemporary application techniques of Carr and Littman, Scholtes, and others. The inspirational literature details the application of TQM in both public and private organizations and encourages managers in all organizations to begin the quality journey. (Deming 1982,1986; Carr and Littman 1990; Dobyns 1990; Gabor 1990; Walton 1986)

When taken in its full context, it is apparent that some level of analysis is missing from the literature. As suggested above, a careful assessment and survey of the literature clearly identifies TQM's historical origins, its techniques and methodologies, and its applications in a variety of organizational environments. There has been some investigation into the association, or grounding, of Deming's philosophy in the philosophy of American pragmatism. (Little 1992) However, there has been no analysis at the fundamental level of TQM's essential ontological grounding. It is at this level that this study focuses, specifically, developing the understanding of the ontological grounding of TQM as the feminine principle. The assumption of the study is that identifying the ontology of TQM is important to realizing its full potential as a truly innovative organizational philosophy. Without understanding how this philosophy is fundamentally different from conventional management wisdom, its techniques and applications could become another manifestation of the

masculine bias in organizations and thus could elicit the depressive responses and energy patterns similar to those seen in other management innovations.

History of the Quality Movement

There are four major eras of quality emphasis that are distinguished by primary focus, techniques, and impact. These periods are labeled as: (1) the Inspection Era, (2) the Statistical Quality Control Era, (3) the Quality Assurance Era, and (4) the Strategic Quality Management Era. This evolution of quality management was not based on the elimination of the techniques or practices of the previous era, but was an expansion and development of techniques and focus. (Garvin 1988, 37)

Inspection Era

The early phase of quality management is solidly grounded in Frederick Taylor's principles of Scientific Management and others associated with the Scientific Management School. (Duncan and Van Matre 1990; Hooper 1982, 1985; Little 1992; Kronenberg & Loeffler 1991) In The Principles of Scientific Management, Taylor (1931) states:

> The principal object of management should be to secure the maximum prosperity for the employer, coupled with the maximum prosperity for each employee. (9)

This objective could be attained by the application of a new management philosophy that radically changed work and the work relationship between managers and workers and designated inspection as one of the eight basic management functions. The focus of this era was on inspecting out defects by specialists. (Garvin 1988; Taylor 1931) Taylor outlined four underlying principles of the philosophy of Scientific Management:

- Development of a true science
- Scientific selection of the workmen
- Scientific education and development of workmen
- Intimate friendly cooperation between management and the men (Taylor 1931, 130)

The application of this management philosophy would lead to the "....increase in prosperity and diminution in poverty, not only for their men but for the whole community immediately around them." (Taylor 1931) This statement reflects the recognition of the important relationship of organizations to the community at large. Forty years later Deming would propose the same relationship between the organization and the larger community. The responsibility of the organization is greater than immediate maximization of profits--it becomes the mechanism for an expanding and improving economy and standard of living.

Taylor's system was comprised of two basic elements:

- Discovery by management of the best way

of performing every component of an operation

- A new division of management and labor in which management is assigned the responsibility for discovering the "best" way of performing an operation. (Taylor 1931, Shop Management, in Scientific Management, x-xi)

According to Taylor, prior to this approach organizations relied on the "initiative" of workers to determine the most effective and efficient ways of performing jobs, thus reflecting the close tie between worker knowledge and the job. The scientific analysis of data and the discovery of the "best way" by management would replace this system of worker "initiative", thus removing job knowledge from the worker and placing it with management. In addition to scientific analysis, a strong, cooperative relationship between managers and workers would be necessary.

> This close, intimate, personal cooperation between the management and the men is of the essence of modern scientific or task management. (Taylor 1931, 26)

Although Taylor's approach relied on standardization, knowledge of operation systems, and the never ending scientific search for improvement, it differs dramatically from the modern quality movement. One of Taylor's fundamental principles was the separation of the worker from job knowledge. Based on the principles of scientific management, management was responsible for gathering and

analyzing data, making decisions, and conveying their findings to the worker. The modern quality movement reverses Taylor's relationship by making the connection of the worker and job knowledge essential for continuous improvement. Also, the focus of this era was on inspecting out defects by specialists as compared to the modern quality goal of building in quality.

Statistical Quality Control Era

Around 1931 the emphasis shifted from inspection to statistical control using the statistical techniques and concepts of W.A. Shewhart.(Garvin, 1988) Shewhart was part of a Bell Telephone Laboratory team trying to provide a means for producing greater standardization and uniformity in communications equipment. Through his research and training, Shewhart saw variation as natural and understandable and therefore predictable. Based on his understanding of variation, he developed the concept of process control using the statistical analysis of performance.

> A phenomenon will be said to be controlled when, through the use of past experience, we can predict, at least within limits, how the phenomenon may be expected to vary in the future. Here it is understood that prediction means that we can state, at least approximately, the probability that the observed phenomenon will fall within the given limits. (Shewhart 1931, 6)

From this statistical analysis two types of causes of variation can be identified: (1) special or assignable causes and (2) inherent or random system causes.

While Shewhart was working on process control, Harold Dodge and Harry Romig were working on the second element of statistical quality control--sampling. (Garvin 1988, 7; Hooper 1982) The concept of average outgoing quality limit (AOQL) was developed to correct the deficiencies of current sampling techniques. During WWII the techniques of process control and sampling were successfully applied to the standardized production of munitions and arms. The training in these techniques was given primarily to specialists and engineers. (Garvin 1988, 10-11; Hooper 1982, 1985)

In 1945 the American Society for Quality Control was founded and by the late 1940s the idea of quality control was firmly established. Its focus was the shop floor and its techniques were based on the use of statistics. (Garvin 1988, 12)

Quality Assurance Era

Following WWII, the tools, techniques, and participants in the quality movement expanded from an emphasis on statistical control to quality assurance. The quality assurance era consists of four elements:

- Costs of Quality

- Total Quality Control
- Reliability Engineering
- Zero Defects (Garvin 1988, 12)

Costs of Quality: Joseph Juran focused on a key question: How much quality is enough? In Quality Control Handbook (1951), he identified the two component costs of any given level of quality as avoidable costs and unavoidable costs. Avoidable costs are those of defects and product failure. Unavoidable costs are associated with prevention (inspection, sampling, etc.) According to Juran, avoidable costs are a "gold mine" because they can be sharply reduced by investing in quality improvement. (Juran 1951, 37)

Total Quality Control: Armand Feigenbaum introduced the concept of "total quality control" with its emphasis on interfunctional teams.

> The underlying principle of this total quality view...is that, to provide genuine effectiveness, control must start with the design of the product and end only when the product has been placed in the hands of a customer who remains satisfied...the first principle to recognize is that quality is everybody's job. (Feigenbaum 1983, 94-98)

Total quality control focused on new design control, incoming materials control, and product or shop floor control which required a mix of technical skills and management skills. (Garvin 1988, 14)

Reliability Engineering: Reliability Engineering

shifted the quality emphasis to a level of acceptable product performance over a period of time.

Zero Defects: Zero defects originated in the Martin Company's attempt to produce a perfect Pershing missile for the U.S. Army. This was a significant shift from the minimization of variation to the elimination of all defects by "doing the job right the first time." According to James Halpin, Martin's Director of Quality,

> The reason behind the lack of perfection was simply that perfection had not been expected. The one time management demanded perfection, it happened". (Garvin 1988, 17)

This quality approach was strong on philosophy, motivation and awareness, but was lean on specifics and problem solving techniques.

Philip B. Crosby (1979) has been one of the most recognized contemporary advocates of zero defects. In his book, Quality is Free (1979), he explains that zero defects are both technically feasible and economically desirable. This is in direct conflict with the historical quality control school's position that some level of non-zero performance is both acceptable and normal. However, this remains a controversial position and continues to be debated by both the experts and the practitioners.

Strategic Quality Management Era

The emphasis on quality control and its defensive, reactive position (prevention of defects) shifted to a proactive, strategic position that viewed quality as a competitive function. (Garvin 1988, 20) This shift was encouraged by increasing foreign competition, product liability suits, government pressures, and Japanese successes. It was characterized by its involvement of top management (CEOs), customer definition of quality, and link to company profits. (Garvin 1988, 21-24) It shifted attention from initial price/cost to life cycle costs. (Deming, 1986; Juran, "Mobilizing for 1970s", p.11) While quality had been viewed in terms of its costs, it was now being linked to productivity. (Deming 1986, Feigenbaum 1983)

Although the idea of ongoing improvements is part of Taylor's management philosophy, quality had become focused on specific targets that were fixed and thus have a static nature. Strategic quality management focused on a continuous improvement process that involved and had the commitment of the whole organization to an ongoing, never ending quest. (Deming 1986, Feigenbaum 1983) One of the primary requirements of this approach was training and team building for all employees--which reestablishes the link between worker, job knowledge, and job.

Japanese Quality Movement

Prior to 1945, the quality emphasis of Japanese organizations was on inspection and standardization. Following WWII, the Civil Communications Section (CCS) was assigned the responsibility of working with Japanese communications equipment manufacturers to improve the quality control of their products and service. The CCS established a series of management seminars that were grounded in the principles of Scientific Management and included segments on leadership and participation. (Hooper 1982, 13-34, 1985) The CCS Seminars were developed by Charles Protzman and Homer Sarasohn, with the support of Frank Polkinghorn. (Hooper 1982, 14) This series covered policy, organization, controls and operations.

Protzman identified four important characteristics of the course:

- The brevity of the course--the manual is only a fraction of a normal management textbook in length
- Its comprehensive nature
- Its being tightly tailored to the needs of its audience
- The way concepts such as leadership were developed, not just in the pages on leadership, but in examples illustrating other subjects throughout the text (Hooper 1982, 21)

One of the important forces that influenced the

Japanese quality movement was the purge of top management after the war in which top managers were purged and replaced by mid-level operations and sales managers. Using the American model, a horizontal training and experience program was adopted that provided a "uniformly promotable" cadre of mid-level managers that knew the operations of the organization. This once distinctly American approach has now been abandoned by many American organizations and has been replaced by a system of top management specialists with little or no production/operations experience. (Hooper 1982, 17)

One of Sarasohn's criticisms of the Japanese quality effort was that the Japanese were taking a too theoretical approach and were duplicating work previously done by Americans such as W. Edwards Deming. Contemporary Japanese managers tend to be extremely pragmatic and resistent to excessively theoretical approaches. (Hooper, 1982, p.31)

W. Edwards Deming, Joseph Juran, and Armand Feigenbaum would join the Japanese effort. Deming focused on the application of statistical analysis, expanded on the work of Shewhart to identify special and common causes of variation, encouraged a systematic approach to problem solving (the Deming Cycle (plan, do, check, act), and emphasized the importance of top management involvement. (Deming 1982, 101-104; Ishikawa 1985, 18-19; Garvin 1988, 183) While

Deming's work had initial success and popularity, it eventually encountered problems of employee resistance, lack of technical standards, and insufficient data. (Ishikawa 1985, 19). At this time, Deming's approach lacked the management and organizational perspective that Juran and Feigenbaum would add.

While Juran included the statistical techniques and focus on continuous improvement, his contributions emphasized management's responsibility for quality, for establishing targets and goals for improvement, and for planning and organizational issues. Feigenbaum stressed a "total quality approach" that involved all aspects of the organizations in the attempt to build quality into the product. Feigenbaum's work was a model for the early Japanese interfunctional approach to building quality into new products. (Garvin 1988, 191)

The Japanese quality movement had a decidedly national, unified focus that can be attributed to the influence of the Japanese Industrial Standards and the Union of Japanese Scientists and Engineers. The Industrial Standards Act was passed in 1949 and led to the first Japanese Industrial Standards (JIS) in 1950. (Ishikawa 1985, 15-16) This standardization was the unifying force for the quality movement. (Garvin 1988, 185) The Union of Japanese Scientists and Engineers (JUSE) was established in 1946 with

the goal of providing research, training, consulting, and promotion for the application of quality. Their efforts were quite successful and JUSE became the link between the public, private, and university organizations in Japan. (Garvin 1988, 186-187)

Two major contributions to the Japanese quality movement were Quality Control Circles (QCC) and Company-wide Quality Control (CWQC). Quality Control Circles evolved from a study group approach to educating and training quality specialists in problem solving statistical techniques to the statistical training of all employees. (Ishikawa 1985, p. 22) QCCs are a part of the broader quality approach of Company-wide Quality Control which emerged in the late 1960s. The basic principles of CWQC are: involvement of multiple functions in the quality effort, the participation of employees from all levels of the organization, continuous improvement, and customer defined quality. (Garvin 1988, 191; Ishikawa 1985, 90-91) Feigenbaum's TQC was the model for the Japanese CWQC, but K. Ishikawa and others explain that the CWQC approach is more comprehensive by the inclusion of not only all functions, but all levels of the organization. (Garvin 1988, 302)

While there is no dispute that the quality movement is based in techniques developed by Americans, there was a decidedly different response by American and Japanese

managers. There are probably a myriad of explanations ranging from the superior capacity and lack of competition for American industry following WWII to a belief that the collaborative, team focus of TQM is more congruent with the Japanese culture. Whatever the reasons for its earlier lack of interest, American organizations have become active participants in the quality movement.

An historical overview shows the evolution of the quality movement and the relationship of the various stages and emphasis. In this literature, there is no attention to the ontology of TQM. The next section reviews the principle techniques and tools of quality management.

Description of Principles and Techniques

Statistical Quality Control

As stated previously, the quality movement and its techniques evolved from the Scientific Management School. In the quality movement, the early use of analysis, specifically statistical analysis, was expanded and refocused on process control. Deming's statistical approach is associated most closely with W.A. Shewhart's theory and the techniques of quality control developed in the early 1900s. Shewhart's work is grounded in the concepts of process, systems, and the belief that process variation is to be expected. The concept of process control, essential to modern day quality management, assumes that variation is natural and can be both understood and predicted. (Shewhart 1931; Deming 1982 1986; Feigenbaum 1983, 352) In 1931, W.A. Shewhart introduced techniques for monitoring and evaluating daily operations and for improving quality. Using statistical measure of variation, the activities of a process can be monitored and analyzed to determine its degree of variation. The first step of process control is the recording of a time plot or run chart that represents activity over a specified period of time or specified number of units. Using the data from the run chart and statistical analysis of central tendency and standard variation, a

control chart is created which will identify the lower and upper control limits, or limits of variation.

> Control limits, once we have achieved a fair state of statistical control, tell us what the process is, and what it will do tomorrow, and not necessarily where we wish the limits to be. The control chart is the process talking to us. (Burr 1953)

Control charts help distinguish between inherent, random variation (system or common causes) and assignable variation (abnormal or special causes). As identified by Shewhart (1931), there are two types of variation: assignable and inherent. Inherent variations are those that are the natural variations of the system and cannot be attributed to any special action. Deming refers to these inherent variations as common causes. Deming uses the term "special" causes rather than "assignable" to indicate a cause "specific to some group of workers, or to a particular production worker, or to a specific machine, or to a specific local condition". (Deming 1986, 310) Shewhart and Deming originally estimated that approximately 85 per cent of variation is system variation and 15% is special variation. Later, Deming revised the estimates to approximately 94% system variation, thus the responsibility of management, and 6% special causes. (Deming 1986, 315) The ability to identify the type of variation and understand its implications is essential.

Common causes create variations that fall within the control limits over a period of time and require the system to change in order to improve. Special causes will lie outside the control limits and must be resolved before the process can be considered "in control." (Deming 1986; Garvin 1988; Juran 1951; Shewhart 1931; Scholtes 1990; Scherkenback 1990)

The statistical analysis of quality management starts with the concept of systems, stable and unstable systems, and causes of variation. A stable system, or process, is one with no indication of special causes of variation and is referred to as being in statistical control. (Shewhart 1931; Deming 1982 1986)

> A phenomenon will be said to be controlled when, through the use of past experience, we can predict, at least within limits, how the phenomenon may be expected to vary in the future. Here it is understood that prediction means that we can state, at least approximately, the probability that the observed phenomenon will fall within the given limits. (Shewhart 1931, 6)

In addition to the understanding of variation, Shewhart identified two types of mistakes that can be made in dealing with variation:

> Mistake 1. To react to an outcome as if it came from a special cause, when actually it came from common causes of variation.
>
> Mistake 2. To react to an outcome as if it came from common causes of variation, when actually it came from a special cause. (Shewhart 1931; Deming 1982)

Although either type of mistake can technically be eliminated, it will minimize losses if management simply tries to make as few of these mistakes as possible.

First, before progress can be made, a system must be stable. That is, there are no special causes of variation. To take action on the normal variations of a stable process will only create more and greater variations. Once the process is stable, then attention can be focused on improving the process. (Deming 1982, 86, 92--Funnel Experiment; Scherkenback 1990) The analysis of both stable and unstable systems requires a variety of tools and techniques.

Although process control and control charts are at the heart of quality management, other techniques such as flow charts, pareto charts, cause-and-effect diagrams, and scatter diagrams are also important. (Scholtes 1990; Scherkenbach 1990) Each of these provides a unique dimension of analysis and understanding of the process or situation.

An essential technique of continuous improvement is the PDSA Cycle. Deming introduced the Shewhart Cycle or PDSA Cycle (now frequently referred to as the Deming Cycle) for learning and improvement. It is a flow diagram consisting of four stages that function continuously:

Plan	a change or a test aimed at improvement
Do	carry out the change or the test (preferably on a small scale)
Study	the results. What did we learn? What went wrong?
Act	Adopt the change. Abandon it. Run through the cycle again, possibly under different environmental conditions, different materials, different people, new rule. (Deming 1986, 92)

This cycle communicates the continuous, never ending quality pursuit of Deming's philosophy.

Continuous Quality Improvement

As stated previously, interest in statistical quality control was very limited in the U.S., until the late 1970s, when American companies began to fear the industrial success of Japan. At this point, Deming and his proteges became the focus of great interest. Deming was blunt, confrontational and challenging to industrial leaders in his diagnosis of the problems and solutions of American organizations. Deming explained that the failure of American organizations is management's responsibility, and it is management's responsibility to lead the transformation of these organizations. This transformation requires the adoption of a new philosophy and theory that focus on continuous quality improvement. Deming placed the responsibility for

organizational performance and improvement on management, which of course controls the system. He stated that a transformation must be grounded in a new management philosophy that focused on continuous, never-ending improvement that has total commitment (company wide, nation wide, all activities). (Deming 1986, 5) For Deming, this was not a repackaging of old ideas, but a revolutionary approach to managing organizations.

Others recognized the problems of U.S. organizations and the success of Japanese organizations. There was the temptation to try to adopt Japanese techniques before understanding the essentially different management philosophies of the two countries. In an appropriately titled article, "American Management has Missed the Point. The Point is Management Itself" Yoshi Tsurumi (1981) states that American managers, workers, and academics have misunderstood the concept of productivity. Managers see it as a trade-off between efficiency and quality; workers view it as the threat of layoffs; and academics view it as techniques for financial budgeting and tight controls. American managers have not understood that techniques, such as quality circles, are not the first step in improving productivity. A cultural revolution is necessary--one that has the commitment to the welfare of the worker as its foundation--and improvement will be impossible until it

occurs. As Tsurumi states:

> For the first time in its history, the United States faces the job of managing economic growth with an increasing scarcity of capital, raw materials, energy sources, managerial skill, and market opportunities. There are strained business-government relations and antagonistic management-employee relations. It is not going to be easy for the U.S. to learn Japan's secret. (Deming 1986, 86)

Deming explains, elaborates, and gives examples of Shewhart's concepts of system, process control, and variation. His understanding of the organizational application of these techniques evolved into his management theory, which includes the fourteen points of management, obstacles and road blocks, and the two basic sources of improvement. The grounding in statistical control and variation, as described by Walter A. Shewhart, are elaborated and numerous examples are cited. Deming developed his Fourteen Points for Management:

1. Create constancy of purpose toward improvement of product and service, with the aim to become competitive and to stay in business, and to provide jobs.

2. Adopt the new philosophy. We are in a new economic age. Western management must awaken to the challenge, must learn their responsibilities, and take on leadership for change.

3. Cease dependence on inspection to achieve quality. Eliminate the need for inspection on a mass basis by building quality into the product in the first place.

4. End the practice of awarding business on the basis of price tag. Instead, minimize total cost. Move toward a single supplier for any one item, on a long-term relationship of loyalty and trust.

5. Improve constantly and forever the system of production and service, to improve quality and productivity, and thus constantly decrease cost.

6. Institute training on the job.

7. Institute leadership. The aim of supervision should be to help people and machines and gadgets to do a better job. Supervision of management is in need of overhaul, as well as supervision of production workers.

8. Drive out fear, so that everyone may work effectively for the company.

9. Break down barriers between departments. People in research, design, sales, and production must work as a team, to foresee problems of production and in use that may be encountered with the product or service.

10. Eliminate slogans, exhortations, and targets for the work force asking for zero defects and new levels of productivity. Such exhortations only create adversarial relationships, as the bulk of the causes of low quality and low productivity belong to the system and thus lie beyond the power of the work force.

11. Eliminate work standards (quotas) on the factory floor. Substitute leadership. Eliminate management by objectives. Eliminate management by numbers, numerical goals. Substitute leadership.

12. Remove barriers that rob the hourly worker of his right to pride of

workmanship. The responsibility of supervisors must be changed from sheer number to quality

Remove barriers that rob people in management and in engineering of their right to pride of workmanship. This means, abolishment of the annual or merit rating and of management by objectives.

13. Institute a vigorous program of education and self improvement.

14. Put everybody in the company to work to accomplish the transformation. The transformation is everybody's job. (Deming 1982, 1986)

Deming (1986) expanded his theory of management and sounded the alarm for American organizations in Out of the Crisis. The fourteen principles are described, the deadly sins are identified, and a guide for leadership is developed.

> This book teaches the transformation that is required for survival, a transformation that can only be accomplished by man. A company can not buy its way into quality--it must be led into quality by top management. A theory of management now exists. Never again may anyone say that there is nothing new in management to teach. (Deming 1986)

Like Shewhart, Deming stresses the importance of operational definitions. Shewhart stated that without operational definitions specifications are meaningless. Operational definitions communicate meanings of words, instructions, measure, law, and so on based on application.

(Deming 1982, 1986, 1992) They are expressed in operational terms of sampling, test, and criterion. (Deming 1986, 276-277)

In his 1982 book, Quality, Productivity, and Competitive Position, Deming addresses the inaccurate belief that improved quality means higher costs and lower productivity. Explaining the costs of defective work, he asserts that improved quality means less rework, less waste, and higher productivity. He reiterates this in OUT OF THE CRISIS (1986) and discusses the chain reaction of quality, productivity, lower costs, and market capture, staying in business, and providing jobs.

In addition to the position on productivity, Deming identifies the major obstacles and problems for American organizations. These were later expanded and categorized as deadly diseases and obstacles. For Deming, there are diseases and obstacles that restrain western transformation. The deadly diseases are:

1. Lack of constancy of purpose to plan product and service that will have a market and keep the company in business, and provide jobs.
2. Emphasis on short-term profits
3. Evaluation of performance, merit rating, annual review
4. Mobility of management; job hopping
5. Management by use only of visible

figures, with little or not consideration of figures that are unknown or unknowable

6. Excessive medical costs

7. Excessive costs of liability, swelled by lawyers that work on contingency fees (Deming 1986, 97-98)

Obstacles include:

1. Hope for instant pudding
2. The supposition that solving problems, automation, gadgets, and new machines will transform industry
3. Search for examples
4. "Our problems are different"
5. Obsolescence in schools
6. Poor teaching of statistical methods in industry
7. Use of Military Standard 105D and other tables for acceptance
8. "Our quality control department takes care of all our problems of quality"
9. "Our troubles lie entirely in the work force"
10. False starts
11. "We installed quality control"
12. The unmanned computer
13. The supposition that it is only necessary to meet specifications
14. The fallacy of zero defects
15. Inadequate testing of prototypes
16. "Anyone that comes to try to help us must understand all about our business." (Deming 1986, 126-143)

Deming focused on the importance and role of supervision and management. The stated purpose of supervision should be to

> improve the performance of man and machine, to increase output, and simultaneously to lighten the load of the production worker, to make his job more interesting as well as more productive...it is not merely to find and record failures of men, but to remove the causes of failure:...(Deming

1986, 193)

This can be accomplished by removing numerical quotas, informing workers of mistakes, and providing training for workers. (Deming 1986, 193-94)

Deming had moved from the early emphasis on statistical techniques to a new and comprehensive management theory. This theory would be expanded by Deming to reveal the philosophical concept of profound knowledge and its components.(Deming 1992) While Deming uses statistical techniques, his approach is very practical. He encourages the use of pencil and paper to plot points: "...look at the data. A few minutes with pencil and paper will answer most of the questions that one could ask of the data." (Deming 1982, 115) The use of statistical techniques, such as standard deviation and t-test, are useful only if the process is in control. As stated previously, that means that there are no special causes of variation. This suggest the importance of common causes (faults of the system). Juran (1951) explains that common/system causes will remain until corrected and can be influenced only by management. (116)

Although all of Deming's work includes support for the concept of knowledge--his quest is not just one a statistical techniques, but one of providing knowledge. In

The New Economics for Education, Government, Industry (Deming, 1992), he introduces a system of profound knowledge as part of the transformation journey. The components of profound knowledge are

- Appreciation for a system
- Knowledge about variation
- Theory of knowledge
- Psychology (Deming 1992, 61-62)

Systems--Deming's notion of a system, an interconnected network of functionally related components that work together to try to accomplish the aim of the system, differs from the conventional management wisdom. His emphasis is on the necessity of an aim. "A system must have an aim. Without an aim there is no system...The aim is a plan for the future. The aim is a value judgement." (Deming 1992, 35) The interaction of system components are cooperation and competition, in which, the cooperation of competitors can provide improved service.(Deming 1992, 40) American managers must learn that to compete they must cooperate. (Scherkenback 1991) The system, or process, may be represented by a flow chart. In contradiction to traditional management, Deming views the flow diagram of a system as the organization chart.

Variation--It is essential that variation be accepted as

natural, or normal, and understandable. Using the statistical techniques of Shewhart, variation can be understood in terms of cause, predictability, and improvement. (Deming 1992, 66-69)

Theory of Knowledge--The third component of profound knowledge is the theory of knowledge. According to Deming, a theory of knowledge relates to the understanding of prediction--if a statement is to convey knowledge, it must predict some future outcome based on consistent previous observations (with the risk of being wrong). (Deming 1992, 69) Deming cautions against mistaking information for knowledge, which can be gained only through theory.

Psychology--The fourth component of profound knowledge is psychology, which:

> helps us understand people, interaction between people and circumstances, interaction between customer and supplier, interaction between teacher and pupil, interaction between a manager and his people and any system of management." (Deming 1992, 73)

Just as variation is natural in processes, it is natural in people. Individuals are influenced by both intrinsic and extrinsic motivators. According to Deming, the most important act for a manager is to understand what is important to an individual. Understanding this, the manager

can nurture innate attributes and supplement with extrinsic factors. However, managers must avoid reliance on extrinsic motivators because they will eventually rob the worker of the "joy of learning." (Deming 1992, 73) A third factor, overjustification, seems to be prevalent in our organizations. Overjustification occurs when extrinsic rewards overshadow intrinsic rewards, and thus make the rewards meaningless. Examples that reflect the loss of pleasure when overjustification (extrinsic rewards) exist are given. This notion of overjustification certainly condemns our traditional approaches to performance appraisal and rewards.

The role of a manager is to lead the organization in the transformation to a new way of doing business. The leader: (1) has theory, (2) feels an obligation to him/herself and the organization to make the transformation, and (3) is practical. The transformation will result in a new system of rewards, cooperative relationships, greater innovation, increased material rewards for everyone, joy in work, and joy in learning. (Deming 1992, 82-84) The roles of the manager after the transformation are:

1. Understands and conveys to workers the meaning of a system
2. Helps people see themselves as components in a system
3. Understands people are different from each other (variation) and tries to optimize everyone's education, skills,

and abilities
4. Is an unceasing learner
5. Is a coach and counsel, not a judge
6. Understands a stable system
7. Has three sources of power: Authority of office; knowledge; and personality and persuasive power
8. Studies results with the aim to improve personal management performance
9. Will try to discover who if anybody is outside the system, in need of special help
10. Creates trust
11. Does not expect perfection
12. Listens and learns without passing judgment on him that he listens to
13. Will hold an informal unhurried conversation with every one of the workers at least once a year, not for judgment, merely to listen.
14. Understands the benefits of cooperation and the losses from competition between people and between groups (Deming 1992, 85-88)

In his 1990 book, The Deming Route to Quality and Productivity, William Scherkenbach explained and illustrated Deming's philosophy and 14 principles. Just as Deming had shifted his attention more toward the fundamental philosophy and grounding of quality management, Scherkenbach's 1991 book, Deming's Road to Continual Improvement, shifts attention to the underlying problems of American organizations and the fundamental changes necessary to make the transformation. He clearly explains the limitations and costs associated with the "detect and inspect" approach to management. He argues that the only long-term successful approach is for management to focus on continual

improvement. He supports and describes Deming's theoretical approach to do this--the theory of change--based on the notion of profound knowledge. Scherkenbach expounds upon Deming's theory of profound knowledge and explains the physical, logical, and emotional changes necessary to operationalize the Deming philosophy. (Scherkenbach 1991)

Public Sector Implementation

While the earliest interest in Deming and quality improvement was in the private sector organizations, public organizations were soon to follow. The public sector application has occurred at the local, state, and federal levels. While there are numerous journal accounts of application, it was not until Carr and Littman's (1990) work that there was a comprehensive look at public sector efforts and recommendations for application. David K. Carr and Ian D. Littman looked at the application of quality management to the public sector and identified and compared various strategies and techniques for implementation. They define TQM as:

> Involving everyone in an organization in controlling and continuously improving how work is done in order to meet customer expectations of quality. (Carr & Littman 1990, 3)

Carr and Littman identify four reasons why public sector organizations need TQM:

- Citizen perception of government quality--only 1 in 11 think government does a very good job.
- Tight budgets and deficits--most governments use a sledgehammer approach to tight budgets and budget cuts.
- Competition for getting and keeping employees--attracting and retaining a top-quality workforce is today's chief challenge.
- Survival--a 1988 consumer survey showed that one-third of Americans feel government services should be contracted out to private industry. (Carr & Littman 1990, 9 - 13)

While explaining the importance of TQM to the public sector, Carr and Littman reiterate what many other promoters of quality management have been emphasizing:

> ...quality management is a holistic management philosophy, not a set of isolated techniques. (Carr & Littman 1990, 25)

This philosophy focuses on systems that are comprised of processes. This is a fundamental shift of attention from the traditional management focus on results to the TQM focus on processes. (Carr & Littman 1990, 46)

To emphasize how radically different the TQM approach is, they compare traditional management and TQM on ten points:

Total Quality Management	**Total Quality Management**
Needs of users of products and services defined by specialists	**Customer focus**, where users of products and services define what they want

Errors and waste tolerated if they do not exceed set standards	**No tolerance** for errors, waste, and work that does not add value to products and services
Products and services inspected for problems, then "fixed"	**Prevention** of problems
Many decisions governed by assumptions and gut feelings	**Fact-based decisions** using hard data and scientific procedures
Short-term planning based around budget cycle	**Long-term planning** based on improving mission performance
Product or service designed sequentially by isolated departments	**Simultaneous design** of total product or service life cycle by teams from many functions
Control and improvement by individual managers and specialists	**Teamwork** among managers, specialists, employees, vendors, customers, and partner agencies
Improvement focused on one-time breakthroughs such as computers and automation	**Continuous improvement** of every aspect of how work is done
Vertical structure and centralization based on control	**Horizontal and decentralized structure** based on maximizing value added to products and services
Short-term contracts awarded based on price	**Vendor partnership** of long-term buyer/seller obligations, based on qualify and continuous improvement

(Carr & Littman 1990, 4)

Carr and Littman explained five patterns of implementation: (1) slow cascading, (2) all-at-once, (3)

spotty pattern, (4) "we're already doing it", and (5) twin-track. They promote the twin-track approach comprised of four phases: assessment, planning, implementation, institutionalization. They predict that it takes most organizations two to five years to reach the institutionalization phase. They identify the structural and personnel requirements and relationships necessary to be effective. They identify and explain the training requirements both in terms of what training is received, who receives it, and who does the training.

They identify the typical statistical control techniques and charts. The PDCA Cycle is expanded by identifying and explaining fifteen points that make up the PDCA Cycle. (Carr & Littman 1990, 81 - 87)

Carr and Littman explain that due to the complex nature of many organizations there "is often a gap in the goals of a product and service and the views, values, and goals of individual process managers." (Carr & Littman 1990, 89) This may be resolved by using Quality Function Deployment which helps "align the goals of a stream of related processes with the expectations of both internal and external customers." (Carr & Littman 1990, 88)

Just as the comparison of traditional and TQM management foci were identified, the vendor relationship is compared.

Traditional	Total Quality Management
Multiple vendors for the same types of products: The reasons for this are leverage in price negotiations and an assumed protection of the flow of supplies.	**Number of vendors minimized**: This creates a vested interest in the mutual success of both customer and vendor. It also allows the vendor to increase the level of specialized services to a customer.
Ignorance of the vendor's quality system: As a result, an organization must use incoming inspection to determine quality. The relationship between customer and supplier becomes one of blame versus assistance for	**Specific quality systems requirements**: The customer requires proof that vendor processes are in control. No incoming inspection is needed. Both parties combine problem-solving resources. achieving quality.
Poor communications of standards and specifications: The arms-length posture between traditional organizations and their vendors means that the vendors cannot become involved in the setting of standards and specifications. The results are confusion and frequent change orders in contracts to correct these mistakes.	**Mutual agreement on standards and specifications**: Customers and vendors work together to set standards and specifications. There are no misunderstandings.
Short-term contracts: Contracts are for a few months or years.	**Long-term contracts**: Contracts are for several years; commitments even longer.
Emphasis on price: Particularly in government, price becomes the overriding factor in selecting vendors. The quality of vendor products and vendor reputation often	**Emphasis on value**: The customer considers the overall value of vendor products, customer service, and vendor participation in the production process.

take a back seat to price. (Carr & Littman 1990, 122)

In addition to the techniques and strategies, Carr and Littman offer a long list of successful public sector quality improvement programs.

Numerous books and training manuals have been written about the techniques and "how to"s of quality improvement. The tools and techniques have been enhanced and expanded by various authors. However, those that are based on the Deming philosophy are grounded on the essential concepts of systems, variation, statistical process control, and the PDCA Cycle.

This section has provided a description of Deming's philosophy and an overview of techniques and tools. While there is an abundance of information on both the specifics and generalities of techniques and strategies, literature on the ontological grounding of TQM is absent. The next section will review the literature covering the application of quality improvement and the support that it has received in many U.S. organizations.

Organizational Application

Nancy Mann (1987), in The Keys to Excellence: The Story of the Deeming Philosophy, gives an historical assessment of the quality movement and Deming's role in it. In conjunction with this historical perspective, she also identifies the reasons for the Japanese success in quality management. Mann's account of the early quality movement in both the U.S. and Japan credits Deming with major contributions and direction. In regard to the U.S. experience, the quality movement played an important role in helping with the successful war effort by substantially improving the munitions industry. (Mann 1987, 8-9) Although quality control in the war effort had been quite successful, U.S. managers did not make the change to a quality approach because they were unaware of the growing problem of poor quality and the means to resolve it. (Mann, 13) At this time the U.S. was still in the inspection mode (inspecting defects out).

Mann describes Japan's recognition of the need to make change in the organizations and its acceptance of the statistical tools presented by Deming and other American industrialists. The following factors were cited as the reasons for Japan's success in the quality movement:

- The almost complete destruction of the

country during the war
- Cultural heritage and homogeneity of their society
- Japanese government cooperation
- J.U.S.E carried on the training and promoted the quality control philosophy
- Dedication of top management
- Cultural bent for herd work and study, cooperation, teamwork and the attainment of long-term goals (Mann, 37)

Mann suggests that the cultural factors were present before WWII when Japan was known for poor quality manufactured goods, thus the primary factors of success are the statistical tools and philosophy of Deming. (1987, 37) In contrast to the Japanese environment, the U.S. environment was very different:

> By and large, the hourly worker in the United States has an appreciation, sometimes an unconscious appreciation, that higher quality means less rework, less waste, a satisfied customer and a chance to take pride in one's work. But most American workers, stultified by fear or apathy, long ago gave up trying to communicate these thoughts to their employers. Instead, a major part of the U.S. working force adopted adversarial tactics similar to those of management, building powerful unions that have exacerbated the schism between management and labor and created a vicious circle of combat that put up ever new barriers to quality output. (Mann 1987, 39)

Additionally, Mann observes the changes in Deming's work. While the 14 principles have basically remained the same, the statistical tools are not specifically discussed, and the underlying philosophy has been modified slightly to give better explanation of the concepts and to reduce the

tendency to understand this as technique and not philosophy. (Mann, 43) These modifications reflect Deming's growing concern and emphasis on leadership. A variety of techniques are described.

Mann describes the changing role of the supervisor, or foreman:

> Rather than acting as expediters who put the fear of God into the people they supervise, foremen in this new role act as facilitator to help the workers build in quality and thereby increase productivity. They help the workers feel a sense of pride and pleasure in their work. (Mann, 102)

Citing Brain Joiner and Peter R. Schotes, Mann (1987) criticizes one of the most popular and universally applied management techniques, MBO. The "underside" of MBO is its focus on short-term efforts that may not help long-term survival; numerical goals without long-term purpose that tend to set up conflict situations; and employee performance appraisal systems that reward conformance rather than fostering contributions to continuous improvement. (1987, 123-125)

Mann is concerned about the conventional management theory that has created elaborate systems of control and bureaucracy which have led to organizations that are overmanaged and underled. (1987, 148-149)

Mary Walton (1986) uses the format of Deming's Four Day Seminar to review the components of Deming's methods and

philosophy. This includes the 14 Points, the 7 Deadly Diseases, Obstacles, the red bead exercise, and a variety of charts. Walton's description of the implementation of quality management at nine organizations gives insight to some of the perils and requirements of the transformation.

Deming's philosophy has been the subject of many popular media programs and articles. His philosophy and its application was the subject of an article and book written by Lloyd Dobyns (1990;1991) and a television documentary based on the book. In these, Dobyns suggests that there is constantly a new "flavor of the month" technique, including MBO, MBR, and MBPRR. He questions whether or not TQM is really new and whether it will be effective. One of the fundamental changes resulting from Deming's philosophy is the belief that quality and cost reduction are synonymous.

> Maryann N. Keller, an automotive industry analyst and managing director of a brokerage firm, believes that the most profound change in the American auto industry in the past ten years was the realization that "quality can cost less because you design it in rather than inspect it in." (Dobyns 1990, 12)

In the television documentary, numerous organizations that have implemented a quality approach are cited and the results of their efforts are used to demonstrate the success of TQM for both the organization and its workers. In addition to the change in understanding of the relationship between quality and costs, the organizations demonstrate the

radical change in the work relationships between workers and managers, and between the various functional departments of the organizations. We see employees at all levels becoming knowledgeable and empowered. The relationship between managers and workers shifts from one of control over and competition to one of control with and cooperation.

Deming's philosophy is one of continuous improvement that comes in small, incremental steps rather than giant leaps. It requires managers and workers to:

> ...unlearn everything about management you've been taught, and develop an understanding of statistics and psychology, and understanding of how people learn and what makes them change, and an understanding of people's need to take pride and joy in their work. (Dobyns 1990, 15)

While Deming has been the recipient of praise and even adulation, some theorists and managers see little difference in his philosophy and the theories and principles of earlier management writers. There is no dispute about the close tie to Frederick Taylor's Scientific Management in reliance on objective statistical measurement and analysis, and in the importance of training. (Duncan and Van Matre 1990, 3-5) However, this connection should be viewed as having great limitations. Taylor's approach moved the source of information and knowledge away from the worker and into the hands of managers. Rather than connecting the worker with the work, it dissociated them and created a

"boss centered" environment where the role of the worker was to "do what you are told."

There have been comparisons to the Human Relations movement and Deming's principles related to workers, motivations, and leadership. Parallels are drawn between Maslow's Hierarchy of Needs, McClelland's motivation model, Hertzberg's Motivation/Maintenance model and Deming's principles in that they all focus on the importance of intrinsic factors, performance, and job satisfaction. According to Duncan and Van Matre (1990), all of these reflect the importance of job design and thus the removal of barriers to pride in workmanship. (8)

George Wagenheim and John Reurink (1991) identify the transition of the "organizing force" that has been occurring in government service from the 1960s to the present. The organizing force of the 1960s and 1970s shifted away from the traditional focus on inputs (salaries, et.) to outputs (program budgeting, etc.) In the 1970s and early 1980s the emphasis moved to MBO and its hierarchical relationships that provided continuity of goals. All of these are internally focused; organizational resources and goals. The customer service perspective will be the new "organizing force." This shifts the perspective to the customer and what the organization needs to do to adequately serve the customer (both internal and external). Management techniques

and strategies needed for this are identified. (Wagenheim & Reurink 1991, 263-269) While Wagenheim and Reurink do not explicitly identify or credit TQM, their "organizing force" is identical to TQM's focus on the customer and the organizational requirements necessary to accomplish quality service.

James E. Swiss (1992) challenges the belief that orthodox TQM can be successfully implemented in government. Many authors support the notion that TQM can be applied to government with only minor modifications. (Carr & Littman, 1990, 2; Kennedy & Young, 1989, p. 87; Deming 1986, p. xi) According to Swiss (1992), the tenets of TQM are contradictory to the principles of modern government reforms including program budgeting, ZBB, MBO, pay for performance, merit pay, etc. (357) Swiss states that there are several major problems in governmental implementation:

> The use of TQM in government has several major problems: insufficient modification for services; insensitivity to the problems of defining governmental customers; inappropriate emphasis on inputs and processes; and demands for top-level intensity that can rarely be met by the governmental culture. (1992, 358)

Swiss posits that orthodox TQM may be particularly dangerous for government because:

> it can encourage a focus on the particularistic demands of direct clients rather than the needs of the more important (but often inattentive) customers, the general public. Orthodox TQM can also cause an organization to neglect or even--if

> Deming's advice is followed--dismantle such established systems as MBO, program budgets, and performance monitoring systems that set clear output goals and monitor results....makes a number of demands for output uniformity and strong, continuous organizational culture that government is intrinsically unable to meet. (1992, 359-360)

He proposes an reformed TQM that would include the focus on client feedback, performance tracking that would include results oriented techniques such as MBO and program budgeting, continuous improvement, and worker participation.

> Reformed TQM, however, jettisons orthodox TQM's hostility to output goals and measurement, deemphasizes its demands for output uniformity and organizational culture continuity, and sensitizes managers to the dangers of satisfying just an immediate clientele. Yet at the same time, reformed TQM saves the orthodox principles of employee empowerment, continuous improvement, and quantitative tracking of product quality and of client reactions. (Swiss 1992, 360)

As with any management theory, or approach, Deming's philosophy has its advocates and opponents. Some advocates are almost evangelical in their enthusiasm and zeal for universal application. Deming is described in almost reverential terms and his tenets accepted unquestioningly. Other advocates have taken a more moderated stance, in that they fully support the basics of Deming's philosophy, but either utilize additional techniques or have developed implementation strategies not included in Deming's work. Both of these groups stand squarely with Deming.

Others, (Duncan & Van Matre 1990; Matthews 1993; Swiss 1992; Wagenheim & Reurink 1991) have not been as accepting or supportive of Deming's philosophy. They have either questioned its legitimacy as a "new" management approach, or its ability to be implemented in various organizations. While there is obviously a range of responses to Deming's philosophy, there can be no denial that it has captured the attention of American managers, workers, and academics.

The literature extensively covers the historical development of the quality movement, the techniques and strategies for implementation in both private and public sector organizations, and experiences of organizational implementation. The analysis of TQM's grounding has been primarily limited to comparisons with other management theories. What is lacking is a critical analysis of its ontological grounding, that is, its grounding in the feminine principle. It is this grounding in the feminine principle that will reveal the truely innovative, radical essence of TQM, will indicate the potential for evoking fundamental change in the ways we conduct business on individual, organizational, and social levels.

To reveal TQM's ontological grounding in the feminine principle, the texts must be critically analyzed for characteristics that are congruent with the feminine principle. The next section of this chapter will explain

the methodological strategy employed for this critical analysis.

Methodological Strategy

Logico-Meaningful Method

This is a theoretical dissertation and, as such, its "methodology" is a strategy of conceptual analysis. Critical exegesis is the theoretical grounding of this project. Theoretical research, in general, and critical analysis, specifically, are traditional in public administration research, as exemplified by Dwight Waldo's classic, THE ADMINISTRATIVE STATE. As has been noted, the literature of TQM and of traditional management theory will be critically analyzed here so as to reveal their respective ontological grounding in gender identities.

While there does not appear to be consensus about the characteristics and adequacy of explanation in social theory and social research, major schools of thought have emerged.

> There appear to be two major types of explanation employed within the social sciences: verstehen (understanding) and prediction.(Sjoberg & Nett 1989, 288)

Prediction relies on the ability to relate gathered data to the hypothesis and predict patterns, results, or behaviors under given conditions. While there is a long history and strong support for the idea that social research can be predictive, the inadequacy and difficulty of "prediction" in the social sciences have been amply identified and documented. These difficulties or limitations include, but

are not limited to, the inability of the researcher to control variables, the researcher's subjective relationship to gathered data, and the interaction of the social scientist with the society or situation being studied.(Sjoberg & Nett 1989, 290) The ability to predict results in the social world is at best problematic.

An alternative to "prediction as a form of explanation" is the "promotion of understanding" as a major aim of social theory or social research. In the tradition of Dilthey and Weber, "understanding" is seen as the basis for adequate explanation. (Sjoberg & Nett 1989, 288-290) The techniques of this approach include typological tools, classificatory schemes, and analytic techniques relating parts to wholes. (Sjoberg & Nett 1989, 290)

The technique used in this study is the critical analysis of literature based on the "logico-meaningful" method of Pitirim Sorokin, which is in the "verstehen" tradition of explanation. Sorokin identified four types of interrelationships of the various elements of culture: (1) spatial, (2) association due to external factor, (3) causal or functional, and (4) internal or logico-meaningful unity based on the logical laws of identity, contradiction and consistency. (Sorokin 1957)

- Spatial integration is based on simple physical proximity or mechanical adjacency (e.g. a pile of trash)

- Indirect association through a common external factor is the association of two or more factors through the association of each with a common factor external to both or all...(e.g. geographic proximity of several factors)

- Causal or functional integration is a combination of cultural elements in which they compose one causal (functional) unity, (e.g. an automobile or a human body)

- Logico-meaningful integration uses the logical laws of identity, contradiction, and consistency to determine whether or not there is a consistency of style or harmonious whole.(Sorokin 1957, 4 - 10)

According to Sorokin,

> The logico-meaningful method acts as a means of ordering into comprehensible systems the infinitely numerous and complex phenomena of the sociocultural world. (Sorokin 1957, 9)

In the logico-meaningful method, the common denominator

> is the identity (or similarity) of central meaning, idea or mental bias that permeates all the logically related fragments. (Sorokin 1957, 10-11)

The essence of this method of understanding is,

> ...in the finding of the central principle (the "reason") which permeates all the components, gives sense and significance to each of them, and in this way makes a cosmos of a chaos of unintegrated fragments. (Sorokin 1957, 14)

Using Sorokin's "logical-meaningful" method, I will look for patterns of congruence (Sorokin's internal consistencies) between the feminine principle and Deming's philosophy of continuous improvement. Patterns of

congruence will provide the basis for an orderly and coherent interpretation of TQM and will elucidate the feminine principle inherent in Deming's philosophy. Examples of congruencies that will be searched for are those that surround the concepts of relationship, knowledge, feelings, authority, and variation. By providing an "understanding" of the feminine grounding of TQM, there is the potential for raising the level of consciousness within organizations. (Sjoberg & Nett 1989, 292)

To accomplish this, I will do a critical reading of selected traditional/conventional management literature and the literature of Deming's philosophy to reveal the central meaning, idea or mental bias of each. The conventional management literature will be read for congruence with the masculine principle. This literature will include a survey of the Scientific Management, Administrative, Human Relations, and Systems Schools. The work of W. Edwards Deming and related literature will be reviewed and analyzed to determine and reveal the congruencies between the ontology of the feminine principle and the tenets of TQM, and the incongruencies between the ontology of the masculine principle and TQM.

The analytical psychology of Carl Jung will be used to ground and describe the concepts of the masculine and feminine. Characteristics of the feminine and the masculine

will be extracted from the feminine psychology, political theory, and goddess literatures. (Chodorow 1978, 1989; Eisler 1988; Gadon 1989; Jones 1987; Keller 1980; Ulanov 1971; Whitmont 1982) Basic Jungian theory will be used to explain the need for balance between the masculine and feminine world views and the consequences of having an unbalanced relationship between the masculine and feminine. The Jungian notions of repression, the conscious and the unconscious, balance, and relationship will provide the conceptual framework for explaining the significance of the feminine gender ontology of TQM.

Essential to this research is its grounding in Jungian theory and its treatment of the concepts of the feminine and the masculine. These concepts elucidate the fundamental energies evoked by the organizational environments and dynamics in which we live and work. The full potential of TQM may be achieved or revealed by exposing the highly feminine characteristics of TQM and seeing it as a fundamental shift in the way we organize ourselves and go about our business.

Personal Reflections on the Methodological Strategy

As I have been engaged in the analysis of the literature, I have begun to realize that there is a consistency between Sorokin's logico-meaningful method and

the feminine principle. The logico-meaningful method searches for the consistency of the central principle, or bias, with the various components, from which a fundamental understanding emerges that helps to make sense and give wholeness to the complexities of "a chaos of unintegrated fragments." To me, this is reflective of the feminine bias towards wholeness, and the epistemological stance of knowledge. That is, in this approach knowledge emerges from relatedness.

The ontology of the feminine principle produces a view of the world, and a way of encountering and responding to the environment that emphasizes the wholeness of being and a "making sense" of this through relationship. A consistency of this technique and the ontology of the feminine principle is the subjectivity of analysis. The feminine principle views nature as an integrated whole in which all parts are related. To deny the relationship of the observer and the observed is antithetical to the feminine principle. In contrast to other, more positivistic methodologies where objectivity is required, this methodology is inherently subjective and does not allow for "testing" in the positivist's sense. It is not predictive in purpose, but rather attempts to provide a way of understanding our complex sociocultural world.

This methodology also reflects combination and balance

of the masculine and feminine principles in its way of understanding. The use of logical analysis to find the "identity," or central meaning, that exists in various principle and techniques of TQM, represents the feminine notion of relatedness and the masculine principle of reason. It is in combination and balance that energy emerges and a powerful means of making sense is revealed.

Chapter 3

THEORETICAL FRAMEWORK OF THE MASCULINE AND FEMININE PRINCIPLES

Introduction

In this chapter I will describe the modern preference or bias for rationality and how it is grounded in the masculine principle. In doing this, I will use Carl Jung's psychoanalytic framework for understanding the psyche's construction--which emphasizes the masculine and feminine polarities. This analysis will then be used in chapters four and five to contrast the masculine groundings of conventional management wisdom with the feminine grounding of Demings' TQM philosophy. In conjunction with the idea of gender polarity, I will use Jung's general theory of the unconscious and the role of repression in the dynamics of the unconscious to illuminate the dangers of the modern masculine bias and the need for development of the positive feminine. Two terms, gender identification and gender principle, will be used throughout this analysis. Gender identification represents the sociological and biological aspect of gender as it refers to distinctions between males and females. Gender principle represents the archetypal aspect, the concepts as related to Jungian theory of psyche

construct, and is applicable to both males and females.

Rationality and Gender Identity: A Review of Current Thought

There is at present a rather impressive array of thought on the question of the essential tie of the masculine principle to the principle of rationality.

> "Male hegemony in the culture is expressed by the generalization of rationality and the exclusion of nurturance, the triumph of individualistic, instrumental values in all forms of social interaction." (Jessica Benjamin 295 as in Jones 1987, 155)

As viewed from the perspective of those like Jones, Western culture has had a masculine bias that has determined everything from its religion (monotheism) to its world view (rationality). As counterposed to the feminine, the masculine principle values: the individual, order, control, hierarchy, authority, objectivity, linearity, abstraction, and rationality. In its archetypal form maleness is: "outward, abstraction, expansion, rationality,. . . . discipline, order, willful rational control." (Whitmont 1990, 5-6) These characteristics manifest themselves in the way society structures itself and goes about providing for its members.

While theorists have long ago identified the elements of rationalism, it is only of late that they have been identified as inherently "masculine" even though the

consistency between the masculine principle and rationality is overwhelmingly obvious. They are both based on a view of the world that reflects order, hierarchy, control and power, centralization, objectivity, the individual, status, and authority of rules. (Whitmont 1990; Tannen 1990; Jones 1987). The traditional male view of the world depicts individuals in a hierarchical social order in which he or she is either one-up or one-down and operates in "opposition to" others in a struggle to maintain control. In this world of status, independence is primary and is represented by authority (the giving of orders to another, not taking them). (Tannen 1990)

The structure of the masculine view is hierarchical. Thus it is based on the super-subordinate relationship, in which the person with the higher position is in control over those subordinate to him or her. Authority associated with one's hierarchical position reflects our ties to social Darwinism and its premise of the "survival of the fittest."(Perrow 1986) Those higher in the structure,according to this view, are there by virtue of having skills and knowledge superior to others and thus are more capable of making the decisions necessary for survival and expansion. Coercion is not the issue in acceptance of the right for one to command and the other to obey; it is "structure" that entitles obedience. Hence this natural

structure of hierarchical relationships allows for a centralized authority, an authority at the top (monotheistic). (Whitmont 1990, 80)

Related to authority's structural aspect is its utilization of rules. Authority, as seen from the masculine perspective, is based on rules that can be deduced by an objective analysis of the facts. Authority is "a set of rules governing political action, issued by those who are entitled to speak." (Jones 1987, 152) In this, authority orders society through a system of rules that determine both actor and action. Rules based authority separates the person from authority, and thus abstracts the notion of authority and action. This relationship is fundamentally rational:

> The overemphasis on "rationality" of authority, i.e. the radical separation of the realm of cognition from the realm of belief and feeling, arbitrarily restricts authority to formal rules." (Jones 1987, 154)

This renders authority hierarchical and dispassionate; enables authority to order behavior; and thus, makes behavior both predictable and manageable. To institutionalize authority is to institutionalize vertical hierarchies of differential rights, privileges, and duties in order to facilitate the accomplishment of some common project. (Jones 1987, 157)

Authority may determine not only who makes decisions,

but how decisions are made. C. Gilligan (1982) explains the masculine approach to choice as

> willingness to sacrifice relations to others in the face of established rules; or, to put it differently, to exchange the uncertainty of human relationship for the certainty of rule

The masculine utilizes an objective, linear way of thinking which separates the individual from the situation and relies on (superior) "facts" rather than emotions or feelings. (Whitmont 1990, 202) This mode of thinking/reasoning reflects an outward orientation where the individual is seen as separate from the environment, and the source of knowledge is held to be outside the individual. The isolation of the individual from both the environment and the source of knowledge creates a situation in which the individual, relying on the rules and facts that define and determine appropriate action, can be in control. This view is in direct contrast to the feminine emphasis on relationship--in which the individual is seen as existing within a network of connections. (Tannen 1990, 25) It is within this network, or relatedness, that appropriate action will be determined.

Western culture's reliance on rules and facts presupposes a natural order within the universe and that an objective scientific method (rationality) can reveal the "truth" or reasons for choosing actions. By discovering and

providing explanation for action or behavior, it can be predicted, and thus controlled. In this belief of a natural order, the notion of variation is devalued in the sense that it is seen as "something to be explained away." The belief in order is seen in our almost relentless desire to impose standards on everything from physiological characteristics (desired body type), grading systems in schools, to performance evaluations.

The feminine perspective stands in contrast to the hyper-rational, masculine perspective. Acknowledgement of the masculine and feminine differences are quite common in both academic and popular culture. There generally are both recognition and acceptance of differences between the ways males and females think, talk, behave, etc. In public and private organizations there appears to be an acceptance that male and female managers demonstrate different behavior in problem solving, interpersonal relations, communications, and leadership. Popular management writers, such as Tom Peters, acknowledge the masculine bias of American organizational life and even argue that the organizational future will require an essentially feminine approach to management.

Male behavior is associated more closely with individualism, a preference for rationality, status, control, and avoidance of feelings or intuition. Female

behavior is more closely associated with contextual problem solving, which may involve feelings and intuitions, a preference for teams and relationship. A current book that has gained a global audience, Deborah Tannen's (1990) You Just Don't Understand, surveys research findings on the gender differences in communication style and technique. Tannen identifies the male propensity toward status, control, and preference for thinking rather than feeling in communication style. Female tendencies toward feelings and relationship reflect a desire or need to be related or share common experiences.

There are numerous accounts of the differences in male and female behavior in both our public and private lives. While these accounts may reinforce an understanding, intuition, or belief that many hold, an understanding of how these differences occur and what the implications are is necessary for this project. I contend that the gender difference, while important, is just a reflection of a more fundamental psychic structure--the masculine and feminine principles--and a fundamental, psychologically grounded bias for the masculine principle.

Other Perspectives on the Issue of Gender Identity

Discovery of, or explanation of a feminine perspective has been a subject of psychology, philosophy, religion,

politics, and other social sciences. Although frequently associated with feminists and women's studies, it has not been the exclusive domain of women in either its attention or resources. M. Esther Harding (1970) not only makes the claim that there is a distinctive feminine psychology, but she:

> presents certain suggestions for action through which each individual who is interested in truth may come to find it more fully in his own life and, through the practical application of the modern knowledge of the psyche, may perhaps build for himself a firmer structure. (Harding 1970, xi-xii)

While the theories of Carl Jung are the theoretical framework used for this study and are the grounding of most modern female psychology, the interest in the female gender and characteristics associated with females has become a concern of most of the social sciences.

In Women's Ways of Knowing (Belenky et al. 1986), the authors explore and describe

> the ways of knowing that women have cultivated and learned to value, ways we have come to believe are powerful but have been neglected and denigrated by the dominant intellectual ethos of our time. (Belenky et al., 5)

Drawing from many feminists, they reiterate the differences in males and females and the modern preference for the masculine perspective:

> ...we believe that conceptions of knowledge and truth that are accepted and articulated today have been shaped throughout history by the male-

> dominated majority culture. Drawing on their own perspectives and visions, men have constructed the prevailing theories, written history, and set values that have become the guiding principles for men and women alike. Our major educational institutions--particularly our secondary and postsecondary schools--were originally founded by men for the education of men....It is likely that the commonly accepted stereotype of women's thinking as emotional, intuitive, and personalized has contributed to the devaluation of women's minds and contributions, particularly in Western technologically oriented cultures, which value rationalism and objectivity (Sampson 1978). It is generally assumed that intuitive knowledge is more primitive, therefore less valuable, than so-called objective modes of knowing. (Belenky et al. 1986, 5-6)

As part of the interest in feminine psychology and development of the individual, Nancy Chodorow (1978) compared the developmental patterns of males and females. Her research indicated that women, more so than men, tend to define themselves in terms of their relationships and connections to others. Chodorow's research has been influential in much of contemporary women's studies.

Related to Chodorow's work, Carol Gilligan's (1982) study of psychological development and the relationship to moral decisions led to the awareness of a "different voice" that is not gender specific, but reflects "two modes of thought. . . ." (1982, 2) Gilligan traced the development of moral judgement to the contrasting concepts of: responsibility and care, and rights and abstract laws.

> The moral imperative that emerges repeatedly in interviews with women is an injunction to care,

> a responsibility to discern and alleviate the "real and recognizable trouble" of this world. For men, the moral imperative appears rather as an injunction to respect the right of others and thus to protect from interference the rights to life and self-fulfillment. (Gilligan 1982, 100)

While Gilligan was careful not to make the correlation gender specific, there was a female pattern of morality based on responsibility, care and context versus a "rights morality" of abstract laws and universal principles for males.

The awareness of and the investigation of the differences in "ways of knowing", moral reasoning, and psychological development are just a few on the many topics of "difference." Attention now turns to an explanation of how these differences occur and what the implications are. As stated previously, while gender difference is important, it is a reflection of the psychic structure of the masculine/feminine principles and the psychological bias for the masculine principle.

The two theoretical frameworks that will be used here to explain masculine/feminine differences, their origins, and their implications are:

> the Jungian psychoanalytical concepts of ego development, structure of the psyche, conscious/unconscious, and the masculine/feminine principle
>
> the related psychological concept of the "male wound"

Together these will provide a framework for illuminating the existence of and bias for the male or masculine perspective/ principle in contemporary environments. This bias is reflected in the paradigmatic stance of rationalism, a stance that has been dominant during the whole of modernity.

The Etiology of the Difference

The Role of Psychic Structure

Jungian theory suggests that male and female psychology are not produced solely by biological or cultural factors, but include a symbolic component. He describes the psyche as:

> ...an autonomous entity, a presence in itself which is not simply an offshoot of the body, nor determined merely by culture. (Ulanov 1971, 142)

This construct of the psyche shows it as a pattern of polarities in which the energy of life and development are transmitted.

> The psyche is structured in polarities of opposites whose interchange of energy is the life energy of the psyche for the human being. These polarities--conscious-unconscious, flesh-spirit, reason-instinct, active-passive--are most often characterized in masculine-feminine terms and are perceived by us, whether we are male or female, as a confrontation with an "other." (Ulanov 1971, 143)

Jung's principles of opposites is based on "the idea that all forms of life may be understood as a struggle of contending forces, a moving, dynamic tension, a continual

'running counter to'." (Progoff 1953, 60) It is this tension that is the life energy:

> ...the presence of opposites means a tension, and that human energies are called forth only because of the tensions created by the pressures of conflicting opposites. 'Everything human is relative,' Jung says, 'because everything depends on a condition of inner antithesis; for everything subsists as a phenomenon of energy. Energy depends necessarily on a pre-existing antithesis, without which there could be no energy. There must always be present height and depth, heat and cold, etc., in order that the process of equalization--which is energy--can take place. All life is energy, and therefore depends on forces held in opposition'. (Progoff 1953, 62)

Related to the principle of opposites and energy is the idea that "the amount of energy generated and set loose varies directly with the depth and intensity of the internal conflict." (Progoff 1953, 62) and the intensity influences the permanency for any new attitude:

> 'After violent oscillations at the beginning,' he says, 'the contradictions balance each other and gradually a new attitude develops, the final stability of which is the greater in proportion to the magnitude of the initial differences.' (Progoff 1953, 63)

The development of the individual is based, not only on the reciprocal action of the opposites or polarities, but on the balanced exchange of energy.

> Their working together makes possible the balanced regularity of these processes, which, without this reciprocal action, would be one-sided and unbalanced....When the flow of libido is obstructed, this cooperation of the opposites is over. (Progoff 1953, 64-65)

In this situation, disharmony is created as the polarities, once united, are in conflict or opposition to each other. This conflict creates energy that is not being applied to progressive adaptation, but is contained and begins to move inward, deeper into the psyche.

> The 'progression' movement of psychic energy is a movement up from the unconscious to consciousness and out into the external world; the "regression" movement goes down from consciousness steadily deeper into the unconscious. (Progoff 1953, 65)

A characteristic of the energy created in this tension is that it is autonomous of the individual consciousness.

> ...The varying intensities of energy expressed in psychic movements are determined by the degree of conflict between opposites. The main characteristic of a tension in the psyche is that its force is exerted beyond the control of the individual. It is autonomous in the sense that it sets energy free independent of the guidance of consciousness. The very fact of its existence as a conflict in the psyche indicates that it is something that consciousness cannot subdue. Energic forces set free by these conflicts, therefore, may operate under their own power and live, as it were, a life of their own ... (Progoff 1953, 81)

One of Jung's most central theses holds that

> 'when any natural function...is denied conscious and intentional expression, a general disturbance results.' For Western man such a situation was and is especially dangerous because, Jung believes, the repressed elements in man are of a highly primitive, violent, and cruel nature. The repressed contents become psychically charged and volatile as a consequence of their repression and take their "revenge" by returning in the form of various cults, crazes, crudities, and, in the modern era, <u>isms</u>." (Odajnyk 1976, 36)

Jung also states "it seems that nothing interferes with the connection between the conscious and the unconscious parts of the psyche more than external success and power." (Odajnyk 1976, 38) Thus, we can infer, the apparent early successes of the masculine dominated management theory exacerbated the tendency to exalt the masculine leading to excessive repression of the feminine. By placing the feminine in a defensive, repressed (unconscious) position, the feminine is energized and must express "... itself in a universal will to destruction; 'that is, the unconscious seeks in turn to destroy a world that seems bent on the destruction of the unconscious." (Odajnyk 1976, 39)

The structure and dynamics of the psyche determine the development of the individual. According to Neumann (1954), the development of the ego occurs in three phases. The first stage, the uroboric phase, is characterized as:

> a representation, not of childhood or infancy as a whole, but the state of consciousness characteristic of that time. The uroboros is an image which captures in one bound the essence of infantile omnipotence, solipsism and relative lack of conscious differentiation. (Samuels 1985, 70)

The second, or matriarchal phase, is:

> dominated by the maternal side of the unconscious, the Great Mother,...forces the ego to play a passive role at first. According to Neumann, there is no differentiation as yet between infant and mother, ego and non-ego, masculine and feminine, or active and passive. (Samuels 1985, 71)

Samuels explains that the early stages of ego development involve separation between the mother and infant. It is in this stage that the pairs of opposites, or polarities, will emerge and it is this structure of polarities that enables further development. This stage will be discussed later as related to the "male wound."

According to Neumann (1954), the third phase, or patriarchal phase,

> ...represents nothing less than the perpetual battle between the generations, between young and old, new and established. (Samuels 1985, 71)

This phase is symbolized by the hero, the dragon and the victim/treasure.

> The dragon, though often androgynous, is contiguous with the mother and the mother archetype. It is certainly with her that the hero must fight. Victory over her will regenerate the hero-ego because the treasure offers the various rewards outlined above and because the deliberate exposure of the ego to the dangers of conflict with the dragon or monster is a vital testing out of strength.
>
> Entrance into the cavern, threatening contact with the mother, transforms the ego. The outcome is enhancement of ego-consciousness. Then the 'feminine' aspect of the victim-treasure plays its part in readjusting the style of ego-consciousness to a more balanced mode.
>
> The hero is the bearer of the ego with its power to discipline the will and mould the personality, and the whole conscious system is now capable of 'breaking away from the despotic rule of the unconscious'(Neumann 1954, 127) (Samuels 1985, 72)

Since the emergence of the masculine and feminine

polarity is a critical component of the developmental process, it is necessary to understand the structure, characteristics, and implications of these polarities.

The Role of the Masculine and Feminine Polarity

The masculine and feminine principles, psychic elements that are separate from the biological and cultural element, are present in both males and females, are fundamental, and represent all other polarities of the psyche. Sexual differences are seen as a means of conveying the "otherness" that we must confront, explore, and establish a relationship with. Jung's concept of the feminine, and thus the masculine, includes three important characteristics:

> Jung's notion that the feminine is not confined only to females; Jung's description of the nature of the feminine in the language of symbol and myth; and Jung's notion that personal wholeness can only be achieved by a full awareness of contrasexuality. (Ulanov 1971, 141)

In this, the masculine and feminine represent certain modalities of consciousness. Ulanov describes Jung's notion of the feminine, its modalities, and implications:

> For Jung, the feminine and its psychology describe not only factors which form a specific female sexual identity but also certain modalities of being which belong to all human beings. These modalities are styles of being and of awareness, ways of relating to reality, digesting reality, and making judgments about it. These modalities express themselves in their own characteristic images, behavior patterns, and emotional

> responses. For Jung and his symbolic approach, the feminine and its psychology describe, point to, and symbolize certain aspects of psychic or spiritual reality. In that sense, the feminine and its psychology represent, in addition to physical and cultural reality, aspects of objective psychic reality. In learning about the feminine and its psychology, we learn something about the objective psyche, about styles of being human that apply to both men and women, although in different ways. (Ulanov 1971, 142)

The feminine is described symbolically as a principle which "refers to it as an inner law or essence, a primary source inherent in the nature of things, like the law of gravity." (Ulanov 1971, 154) Jung uses the concepts of Eros and Logos in describing the essence of the masculine/feminine polarity.

> The concept of Eros could be expressed in modern terms as psychic relatedness, and that of Logos as objective interest. (Jung, "Woman in Europe," 123. as in Ulanov 1971, 155)

Jung sees the principles of the masculine and feminine as determining the consciousness and unconsciousness of males and females respectively. The concept of eros, not to be confused with the goddess Eros, represents

> ...the urge to relate, to join, to be in-the-midst-of, to reach out to, to value, to get in touch with, to get involved with concrete feelings, things, and people, rather than to abstract or theorize. (Ulanov 1971, 155)

This relatedness is not the same thing as relationship, which presupposes a consciousness and a consciously developed connection to an "other." Relatedness describes

an unconscious drive toward connection with.

The masculine principle is represented symbolically by logos, which is associated with "...discrimination, judgment, insight, and relation to nonpersonal truth,...". (Ulanov 1971, 155)

The masculine/feminine principles are also described as modalities that shape our being.

> ...femininity and masculinity are conceived as two modalities of the process of separating the ego from the original self, from the unconscious matrix--giving oneself to the world and making the world for oneself.
>
> Implicit in these two modes of being are the necessity for reciprocal integration, the annulling of negative otherness, and the aim or reconstructing the self. (Moreno, 183-184) (Ulanov 1971, 156)

Wholeness requires that both the masculine and feminine modalities be set in polarity and union. This does not mean a simple identification or fusion, but an understanding of both in order to have wholeness. As will be discussed later, the lack of integration or repression of either principle has potentially harmful consequences.

The Role of Archetypal Patterns of the Masculine and Feminine

There are two basic patterns of the masculine and feminine principles: the elementary or static; and the transformative or dynamic. These create four patterns of

the masculine and feminine that are revealed in our lives.

These are:

- static feminine--inward focused, associated with <u>being</u>, receptive, enclosing, stable and symbolized by the uterus and the archetypal image of the Great Mother--the negative static feminine is associated with smothering, entanglement, inertia, fixation, and devouring (the Devouring Mother)

- dynamic masculine--outwardly focused, associated with initiative and action directed toward a goal, symbolized by the penetrating phallus and the archetypal image of the Dragon-Slaying hero--the negative dynamic masculine is associated with domination and refusal to recognize the claim of other perspectives

- static masculine--tendency toward organization based on rational knowledge, linear systems of meaning, theories of truth, and discriminating hierarchies of value (Hill, 16); reason discrimination and judgment; the tendency to create systems of order as expressed by the tendency to create impersonal, hierarchical social organizations; archetypal image of the Great Father or King

- dynamic feminine--tendency toward an urge for change, transformation, undirected movement toward the new, the nonrational, the playful; spontaneous, open to experience, yielding and responsive; participation and process; symbolized by birth, a spiral (disorientation and transformation); and archetypal images of Dionysos, the dancing maenad, and the trickster (Hermes);--the negative dynamic feminine reflects excessive relationship to other patterns resulting in disintegration and chaos (depression, abuse, etc) (Hill 1992, 3-20) (Ulanov 1971, 157-162)

Static Masculine	Dynamic Masculine
Order	Initiative
Rules and regulations	Goal-directedness
Systems of meaning	Grandiosity
Hierarchies of value	Linearity
Theories of truth	Technology
Standards	The Dragon-Slaying Hero
Persona	
The Great Father	

Static Feminine	Dynamic Feminine
Organic, undifferentiated wholeness	Transformation
Uterus, nature-in-the-round	"Altered states"
Being and self-acceptance	Imagination and play
The Great Mother	Liminality and "potential space"
	Dionysos, the Dancing Maenad
	the Trickster

The Two Polarities of the Positive Masculine and Feminine (Hill 1992, 21)

Static Masculine	Dynamic Masculine
Order, organization for its own sake	Inflation
Complacency, rigid expectations	Willfulness and determination
Dehumanizing righteousness	Rape, directed violence
Inauthenticity, pettiness	Life-taking technologies
The Saturnine Senex (bitter, envy-ridden old man)	Disregard for nature and ecology
	The Despot

Static Feminine	Dynamic Feminine
Smothering entanglement	Transformations and altered states
Inertia, ensnaring and devouring routine	leading to chaos, emptiness, despair, and death, including depression
Stuporousness, mere existence	alcohol and drug intoxication,
The Devouring Mother	hysteria, and identity diffusion
	The Madman or Madwoman

The Two Polarities of the Negative Masculine and Feminine (Hill 1992, 22)

These elements are configured in two sets of polarities which reflect the flow of energy in the development of the individual. Essential to this are Jung's notion of compensation, which allows for the opposite poles to compensate for each other--e.g., the static masculine compensates for the dynamic feminine. Also essential is the idea of the countervailing influence, which moves the energy to the other polarity. For example, without the

countervailing influence, the pull between the static feminine and the dynamic masculine would be an endless flow of energy between these two polarities resulting in arrested development and possible domination by one pole. (Hill 1992, 23-26)

The flow of energy, based on compensation and countervailing power, leads toward wholeness. However, this development may be thwarted at any stage and any polarity. For example, the experience of the static masculine is the discovery of order (hierarchical), rules of conduct as prescribed by a set of roles and expectations, and security. (Hill 1992, 78) If the experience of the static masculine is well proportioned, the compensatory experience of the dynamic feminine will be well proportioned as well. Likewise, if the experience is excessive the compensatory experience will be excessive and the tendency is a "stuck" pattern between the compensatory poles and the repression of one polarity. In Western culture, which is patrivalent, there is a tendency for the static masculine to be excessive:

> The patrivalent culture pattern utterly supports the static masculine and tolerates the static feminine and the dynamic masculine as necessary precursors to static-masculine development, but the dynamic feminine tends to be feared and truncated as much as possible. (Hill 1992, 80)

The dynamic feminine is pushed into the unconscious and may

be projected onto others in the form of "the blacksheep" or "scapegoat." (Hill 1992, 82)

The two polarities of the positive masculine and feminine reflect a structure conducive to development. The two polarities of the negative masculine and feminine reflect both excessive repression and the emergence of the destructive aspect of each principle or polarity.

The Role of the Male Wound

In the developmental process, which entails, in essence, moving between the polarities toward psychological wholeness, it appears that the male and female experiences are quite different. It is believed that during early childhood the male child separates psychologically from the mother and that this separation "generates needs and tensions in the male mind for which there is no direct female equivalent." (Hudson & Jacot 1991, viii) This separation, known as the male wound, is seen as

> ...an emergent property of the interaction between forces which are variously biological, psychological and social; and as constituting for that reason a topic about which the various human sciences-biological, psychological and social-are well placed to cooperate. (Hudson & Jacot 1991, xi)

This experience and related phenomena result in certain characteristics or attributes of the male which include:

- It is a centrally-placed feature of the 'male' male's mental architecture
- It is an energy source--a source of unresolved (and in principle unresolvable) tensions
- It exerts a formative influence on the imaginative needs the male subsequently experiences
- It imparts to the expression of those needs a characteristic bias or spin
- Its action is evidenced by a loose-knit group of tell-tale signs
- Its influence is of the kind that, in the short term, can often be overridden, but that tends stubbornly to reassert itself over the longer run
- Its forms of expression in the adult are protean (Hudson & Jacot 1991, 54)

It is associated with

- Segregation of the personal from the impersonal
- A preoccupation with issues of intellectual control
- The conjunction of the control with partisan and aggressive sentiments
- Characteristic patterns of costs and benefits
- Characteristic patterns of career choice
- Orderly relations between the first of these patterns and the second

In terms of style the 'male' mind will

- Be intolerant of 'messy' arguments--i.e., ones that lack formal structure and are, variously, intuitive, empathetic, indeterminate; and
- Emphasis the virtues of dispassion and

objectivity (although what is displayed will usually be the exercise of intelligence in the service of enterprises which are partisan and combative, and in the sense impassioned and non-objective)

The male mind will prefer:

- Arguments cast in terms of dualities and dialectical opposition (Like male/female, conscious/unconscious, mind/body, theory/evidence) and their reconciliations
- Arguments that depend on the maintenance of conceptual boundaries and segregation (like that between natural sciences and the social ones), and on colonizing forays across such boundaries
- Arguments (e.g. about classification) that depend on a deep preoccupation with similarities and differences
- Arguments that are reductive, especially one that explain the subtly experiential in terms of the prosaic and literal
- Arguments centering on ideas--often highly technical--the truth of which is perceived as luminous. (Hudson & Jacot 1991, 54-57)

Hudson and Jacot identify four basic levels or layers of sex and gender that interplay and which constitute individual personality. These layers are:

Biology--anatomical and physiological differences

Gender Identity--the sense we have of belonging either to the male half of the human race or the female half

Object Choice--the person on whom we find our erotic passions focused-this is not a specific individual, but a representative of a group or type

Presentation of Self--how we present our self as a

social being (Hudson & Jacot 1991, 24-29)

It is these four levels that will be used to explain the "male wound" and its implications. While there is substantial verification of the biological differences for the female and male, even in the womb, the focus here is on the psychological difference.

The theoretical framework suggests that male and female infants derive comfort and security from their mothers or mother substitutes. This intimate, symbiotic relationship with a caring and supportive mother is the basis of normal development and is the context in which the infant will first experience frustration and pain--milk that is not instantly available, stomach pain, and impeded urge to explore. (Hudson & Jacot 1991, 39) While deriving great comfort and pleasure from this symbiotic relationship, development requires a separation of child from mother.

In addition to establishing its position of separateness, the infant will take on its gender identity. For the female child this is simple--she perceives herself as similar to the mother, who has been the source of her emotions (pleasure and pain). The male experience is different in that he must disassociate with the mother (the source of comfort and security) and identify with the father. According to Greenson

... the male child, in order to attain a healthy

> sense of maleness, must replace the primary object of his identification, the mother, and must identify instead with the father (Hudson & Jacot 1991, 40)

and it is this additional step that is the source of special adult male problems and characteristics.

The first developmental process, *dis-identification*, and the second process, *counter-identification*, in combination are called the *male wound*. According to Hudson and Jacot

> In order to align himself with his father, the little boy first creates within himself a dislocation; and in as much as he imitates his father's object choice-his desire for women-he must do so with this dislocation as its prior condition. (1991, 40)

While symbiotically connected to the mother, both male and female child perceive the mother as "similar" and the father as "other." However, as the male gender identity occurs there is a reversal of position. The father, who was previously the "other" is now "same" and the previously 'same' mother is now seen as 'other.' The male experience is "a reversal--one of similarity-in-difference and difference-in-similarity--which his sister does not." (Hudson & Jacot 1991, 40) This experience carries an emotional force that will influence the male's subsequent experiences. (Hudson & Jacot 1991, 41) This may explain the tendency of males to see people as objects and objects as people, or the tendency toward objectification.

There are six patterns of dis-identification and counter-identification:

> The conventional one, in which the biological male dis-identifies with his mother and counter-identifies with his father
>
> The biological male who neither dis-identifies nor counter-identifies
>
> The biological male who dis-identifies but fails to counter-identify
>
> The male child who counter-identifies with his father without first having dis-identified with his other
>
> The male child who dis-identifies with his mother, but counter-identifies with another woman
>
> The male child who dis-identifies with his mother, but counter-identifies, subsequently, not with a person but with an emotionally charged idea or symbol (Hudson & Jacot 1991, 42-44)

In this last pattern, it is not necessary for the father to be present, but:

> It assumes that the maleness at issue is abstract: a property not of individuals but of the disciplines inherent in child-raising and in the child's acquisition of impersonal symbolic skills. Either parent can be seen both as a source of physical and psychological comfort and as the embodiment of authority. On this argument, the male child counter-identifies not with his father, but with those aspects of his parents he intuitively perceives as impersonal (and in that sense 'male'). (Hudson & Jacot 1991, 45)

It is both the first and sixth patterns that reveal the implications for work relationships and development of management theory. In the sixth pattern, the ability to counter-identify with an "idea" and endlessly pursue it may

be seen in examples such as Taylor and Scientific Management, and Simon and the decision making theory of rationality. Just as Taylor and others developed the theories, males that counter-identify in the first pattern are able to "understand" and implement them--they make sense--and it allows the work of organizations to be executed in a "masculine" way.

There are both costs and benefits for the adult male resulting from the wound. Two primary shortcomings are:

- personal insensitivity
- misogyny (Hudson & Jacot 1991, 45)

The primary benefits are:

- the idea of agency--the individual's freedom, that is to say, to act on the world in the light of his own needs and intentions:
- The wound as a constantly replenishing source of psychic energy
- The notion of abstract passions (Hudson & Jacot 1991, 49)

With this sense of agency the male is

> poised...to heal his wound at one symbolic remove; to use the anxiety his separation provokes in him to create systems of ideas which can stand in the place of lost intimacy, and within which he can strive for coherence and harmony. (Hudson & Jacot 1991. 49)

In addition, the inexhaustible energy can be directed toward a search for order in chaos or creating forms of order that are perceived to be superior to those existing. (Hudson &

Jacot 1991, 49)

The male develops the ability to pursue abstract ideas with apparent objectivity and with passion. The male wound offers an explanation of this:

> that it springs from a dissociative movement of the mind in which the inanimate--things, systems of ideas--acquires the intense emotional significance previously lodged in people, and in which people, stripped of that significance, are treated as though they were things. (Hudson & Jacot 1991, 50)

Not only does this capacity exist, it is believed that the passion experienced "will be the more enduringly gratifying the more completely divorced from human relationships they are." (Hudson & Jacot 1991, 51) Hudson and Jacot claim that

> ...in combination, dis-identification and counter-identification create in the 'male' a sense of agency, allied to a constantly replenishing source of imaginative energy. And that these same processes draw him towards the inanimate--the world of things, mechanisms, abstract ideas and systems within which he operates with the commitments and fervor we might otherwise have expected him to display towards people. (51)

There are three primary ways in which the male may relate the objectifying to the personal.

> By segregating his personal experience (that is by separating his attention to the impersonal from attention to the personal, allowing the impersonal to grow and the personal to wither)--This is most closely associated with preoccupations of science and technology.
>
> By attacking the personal and subjugating it--This is most closely associated with reductive forms of biology and psychology.

> By recreating it in symbolic terms--this is associated with creative arts. (Hudson & Jacot 1991, 53)

The implications of the wound, especially revealed biographically, are that

> ...even the most stable solutions to the dilemmas of dis- and counter-identification contain hints of precariousness; and that, as a consequence, the work of maintaining the wound's dissociations is never quite done. ...even in the most austerely abstract of 'male' thought, traces of the wound's intimately human origin are often detectable, and are perhaps never finally expunged. (Hudson & Jacot 1991, 57-58.)

Research indicates that family environment is a formative component in the development of the child.

> Almost everyone concedes, nevertheless, that the influence of parents is formative. It is the domestic family unit--the 'family nexus'--that determines whether the effects of the wound are going to be so extreme as to appear a self-caricature; or, conversely, that they will be obscured to the point where they can seem vestigial. (Hudson & Jacot 1991, 59)

While the body of research about the effects and implications of mother/child relationship and child rearing techniques is not definitive, it certainly indicates that the mother/child relationship affects him emotionally and intellectually.

> ...the influences parents have on the development of their child's imagination, pointing to a serious awkwardness which we illustrate with a further example. Continuously present is the idea of costs and benefits counterbalancing one another; of gains on the swings compensating for losses on the roundabouts, and vice versa. (Hudson & Jacot 1991, 62)

Using biographical analysis of several great intellectuals, Hudson and Jacot support their premise of the family nexus. While being aware that biographical analysis may be "a perilous enterprise", there appears to be recurrent themes or patterns.

> In particular, it seems that extreme movements of imaginative energy, away from the realm of flesh-and-blood and towards that of abstraction, occur in conjunction with early deprivation or loss.
>
> ...and it suggests three generalizations:
>
> To greater or lesser degree, upbringings leave the individual in a state of internal dislocation or fissure;
>
> The resulting ambivalences and dissonances can often be contained (and temporarily resolved) by the displacement of imaginative energy into activity which is symbolic; and
>
> Such displaced energy is likely to be of passionate intensity where the underlying dislocation and fissuring is profound. (Hudson & Jacot 1991)

The pattern of occurrence and the generalizations reflect the impact of the male wound on the intellectual pursuits and the imaginative processes of the individual.

While the context of the child's development of imagination is personal and complex, the ability to separate formal thought and the personal is unclear. A range of imaginative patterns includes:

- Adults for whom the imagination finds its most gratifying expression in an intimate (and, more specifically, intimately sexual) relationship. If the relationship fails,

sexual intimacy becomes a battle ground, centrally placed and obsessing. In as much as it succeeds, such intimacy is self-fulfilling, an end in itself;

- Others for whom intimate sexual relationships are vital, but as a context--the one in which their gifts blossom, whether as architect, say, or dancer, or entrepreneur;

- Those--Rilke, for instance--for whom the imagination finds expression in the idea of sexual intimacy, not in its actuality, and for whom this idea becomes the subject of whatever work they do;

- Those like Schopenhauer (and also Freud) for whom the psychic energies let loose in sexual intimacy must somehow be understood and brought under intellectual control; and

- Those like Descartes for whom the imagination, while remaining intuitive and impassioned, can only flourish in setting which are abstract. (Hudson & Jacot 1991, 74-75)

In the last three patterns, "thought in the public realm is fuelled as a matter of course by the displacement of passion which in its origins is private." (Hudson & Jacot 1991, 76) This in no way devalues the imaginative thought, but reveals the energy or driving force behind it. It appears that in terms of imaginative energy there is a dark side of the compensatory, cost-benefit relationship.

> Biographical evidence strongly suggests that the less harmonious the individuals' upbringing and consequent internal arrangements, the more displacable passion they will have at their command. (Hudson & Jacot 1991, 76)

The "wound" is both the source and the constraint of

male imagination. There is an underlying similarity in the imaginative enterprises:

> The 'male' man is evidently drawn to the dramas of purity and cleansing, of force, and of the penetration of mysteries. Uniting such concerns, invariable, there is a preoccupation with the idea of order: of structures and of boundaries which confine and limit. More specifically, and especially when the subject matter is human, the processes of the male imagination appear, time and again, to come to rest on dualities and schisms, and on the task of resolving these by the **power of reason**.(emphasis added) (Hudson & Jacot 1991, 117)

An excellent example of the existence and implications of the male wound and its related masculine bias in the scientific arena is the work of Francis Bacon. While many critics have stated that the assumptions of modern science are characterized by the surface motives of control and domination, Evelyn F. Keller (1980) explores its more fundamental grounding in the masculine principle by analyzing the work of Francis Bacon. Bacon very clearly articulated the purpose of science as the control and domination of nature through the relationship between scientific knowledge and power.

> What was Bacon's vision? It was, without a doubt, of a science leading to sovereignty, dominion and mastery of man over nature, the "command of nature in action." It is in science that "human knowledge and human power meet in one," where man's native ambition for power finds its constructive, noble and humane outlet. (Keller 300)

Though not explicit, his work reflects the masculine

propensity toward objectification necessary for attaining the control over nature and its corollary rejection of the feminine.

By analyzing Bacon's writing, Keller exposes a sexual dialectic in his references to the "male" mind and the "female" nature. This dialectic structure is characteristic of the male imagination. (Hudson & Jacot 1991, 57) In this dialectic, it is the mind that must overcome/control nature by obeying her---"Now the empire of man over things depends wholly on the arts and sciences. For we cannot command nature except by obeying her." (Keller, 300 from Francis Bacon, The New Organon and Related Writings, ed F.H. Anderson (Indianapolis: Bobbs-Merrill Press, 1960, 29) Bacon describes how nature is overcome by technique of the scientific mind and how, in this process, nature loses its undesired femaleness and thus becomes divine and masculine (no longer feminine). Through this, the scientific mind and nature are both "he"/masculine and thus the feminine has been simultaneously dominated and appropriated by the "he" of modern science.

In Benjamin Farrington's analysis of Temporis Partus Masculus, or The Masculine Birth of Time, he reveals Bacon's repudiation of ancient science as female and the identification of modern science with the transformation of the mind from female to male. As Keller explains:

> Bacon's metaphor, in condensing the dual impulse to appropriate and deny the maternal, seems to resemble the boy's Oedipal ambitions. As such it represents a bypass, a compensation for and a way of doing without the mother. Omnipotence is secured by an identification with the father which allows simultaneously for the appropriation and denial of the feminine. Both the child and science can now enter the man's world.
>
> In the context of this interpretation, the sexual aggressivity of Bacon's imagery begins to assume a somewhat defensive quality. What is most immediately conspicuous in that imagery is its denial of the feminine--a denial often taken to be quite generally characteristic of the scientific endeavor....
>
> The scientist himself has assumed the procreative function which Bacon had reserved for God--his mind is now a single entity, both phallus and womb. However, his kinship with Bacon continues to survive in his simultaneous appropriation and denial of the feminine. (Keller , 306-307)

While no claim is made concerning Bacon's parent-child relationship, his theoretical pursuits and intellectual style reflect the characteristics of the male wound and a definite masculine bias.

The fact that the major management theorists, with the exception of Mary Parker Follett, are males thus becomes extremely important and revealing. Regardless of the various responses to the wound, the impact of the wound on male imagination/thinking has been established thus far. The resulting objectification that occurs with the wound, the preoccupation with 'order', and the bias toward reason are hallmarks of management theory.

We see in the masculine preference, not only the role of the feminine, but the implications that it has for behavior. The hyper-rationality of modernity has resulted in an imbalanced situation where the theories we develop become personal, and the persons we live and work with become objects. As will be discussed in the chapter on conventional management wisdom, the dominance of the masculine principle and its tendency toward objectification have resulted in management theory that is being found deficient particularly in the contemporary highly diverse and dynamic environments.

Manifestations and Implications

The theoretical framework of Jung's structure of the psyche and development of the individual ego in conjunction with the theory of the 'male wound' provides an insight and understanding of the modern preference for the masculine principle. It also provides the basis for understanding and developing a feminine response to this preference.

As previously stated, the masculine principle is characterized by concern for order, rationality, objectification, abstraction, and individualism. These characteristics or preferences may be explained by the male's individuation process, which as has been noted, is different from that of females. In addition to this

process, these same preferences may be communicated and developed in females. In both cases, if there is repression of the feminine principle, the developmental and psychological costs are enormous. As discussed in the section on the unconscious, the repressed polarity will be energized in its negative form and will express itself in destructive formats.

Western preference for rationalism and its accompanying focus and reliance on science reflects its masculine bias. Jerome Bernstein's, Jungian analyst and former federal bureaucrat, analysis of the individuation and development process of the modern, Western male reveals the imbalanced relationship of the masculine and feminine polarities. The patriarchal principle's dominance over the matriarchal has become problematic in its continued repression of the feminine and results in the increased, unconscious pull of the feminine. Bernstein asserts:

> ...what was (and remains) a function of the masculine archetype (i.e., science) has become identified with man's ego, and his intellect and with the power principle. This has led to a strong ego inflation and Western man's over-identification with the intellect, impoverishment of the spirit, and an over-specialization of science. Modern man's rationalism has led him to dismiss the psychic dimension and as a result he is at the mercy of the psychic underworld of which he is unconscious. (Bernstein 1980, 44)

Bernstein is concerned that science "appropriates the intelligence (and the soul) of men for its own ends."

(Bernstein 1980, 47) Men become captive to the very technology that serves them:

> Cynically, it serves the purposes of the negative aspect of the father archetype to perpetuate the delusion of man's complete control over science as an instrument of his ingenuity....This delusion and man's hubris reinforces the dominance of science over man's ego and his ignorance of his plight with disastrous implications for individual men and civilization as a whole.(Bernstein 1980, 47)

As stated, the dominance of the masculine over the feminine will result in a repressed feminine that will manifest itself through the unconscious. In the past several decades there has been an emergence of the feminine archetype:

> Although the roots of the current freeing of feminine archetypal energy can be traced back to the suffrage movement in the 1920s and beyond, the unfolding of that drama has become a universal aspect of our culture only in the past two decades. It seems evident that a psycho-evolutionary drama is taking place in our culture, manifested in a resurgence of the archetype of the feminine. The latter, in its modern manifestation in our culture, is split into its positive and negative aspects. ..."The Emergence of the Feminine Hero" and "The Emergence of the Devouring Mother,"...(Bernstein 1980, 49)

One of the ways the Devouring Mother has emerged is in the form of giant corporations and big government.

> The modern Devouring Mother appears in the guise of a benevolent, nurturing protective mother, rekindling images in men of the most nurturing aspects of the maternal. This image of her seemingly nourishing, protecting nature is perhaps the most deadly manifestation of her most destructive side, for behind it lurks a Devouring

> Mother that seeks to hold modern man to her breast with a stranglehold, opposing his masculine individuation at every turn. (Bernstein 1980, 64)

All of this creates an environment where the repressed feminine will be energized in its negative form. This energized feminine becomes bent on destroying that which has repressed it. Bernstein argues that modern organizations reflect a psychosis created by the repressed feminine. This repressed feminine emerges in the form of the Devouring Mother that consumes that which she has created. In contrast to the Great Mother (the positive feminine) the Devouring Mother ensnares, creates dependency and inertia, and consumes the life energy.

As discussed previously, the positive expression of the static feminine is:

> the basis of the conservative, unchanging, and stable quality of the feminine which predominates in motherhood....is symbolized in images of the good mother who bears, protects, and releases, leading from darkness to light...makes itself felt in such emotional responses as feeling secure, protected, fundamentally accepted and acceptable, with a reservoir of hope and possibility...is communicated in behavior that expresses a sense of confidence, security, and optimism, or that expresses protective and solicitous concern toward others, conveying trust in their essential acceptability and rightness.
>
> In its negative expression...is described symbolically as ensnaring, fixating, holding fast, leading from light to darkness, depriving, rejecting, acting as a regressive undertow of unconsciousness that drags one beyond one's depths to be swallowed up....appears undifferentiated and collective, as devouring, castrating, and

> indifferent to individual consciousness and development. This negative quality is depicted in such images as the terrible mother who eats her children alive, or the Gorgon's head that paralyzes anyone who gazes upon it....Typical emotional responses...are a feeling of inertia bordering on paralysis, a feeling of being dragged down into a depression from which one cannot escape, a sense of drifting into unconsciousness....Typical patterns of behavior...are an inability to make decisions, a feeling of being fixed in place, and a regression to more primitive behavior....One may act out impulses unconsciously, without thinking the action through, or express various states of unconsciousness by addiction to drink or drugs. (Ulanov 1971, 158-159)

Modern organizations, with their seductive benefits (salary, retirement, status, security) lure employees into career relationships that deny and sap their own creativity and energy. The hyper-rational organization processes focuses on compliance to organizational rules, regulations, and routines, thus enforcing the status quo. Innovation becomes difficult--first, because workers have lost touch with their creativity; second, because they are hesitant to change or challenge the accepted order; third, because decisions have to go through a hierarchical approval system that smothers the innovation. IBM may serve as an example of this phenomena. It has long been known for its centralized structure, rules, and powerful conformist culture. In the past years of slowly emerging technology and limited competition, its structure and culture was successful. As the environment has changed--fast emerging

technology, increased competition--the very characteristics that IBM prided itself in and attributed its success were its downfall. It appears incapable of responding to these changes positively or innovatively. As it responds to losses, rather than profits, workers (including the CEO) are being released, dividends cut, and products eliminated. The negative feminine emerges in unrestrained chaos and destruction.

The large corporation or government is able to provide the security of employment, a viable retirement system, and economic peace of mind. However,

> ...the object of all this maternal nourishment is not the infant child with his nascent ego, but rather insecure adult males (and females) ....(Bernstein 1980, 68)

In this tantalizing haven, the Devouring Mother nourishes, protects, and cares for the individual. She bestows power on the individual and reflects this power in the titles, offices, and perqs. The opportunities for growth and development are not for the individual, but are within the organizational context.

> The very benefits that are provided create a dependency on the part of the individual worker which subtly but inexorably erodes his self-definition and self-esteem....Whereas creativity previously came spontaneously from his own soul, he is subtly encouraged and rewarded by the corporation to focus and direct it--in ways that satisfy the needs of the Great Mother. And most deadly of all, the financial "largess" of giant corporations and big government is so seductive

> and addictive, growing ever-bigger the longer a man remains in the bosom of the Devouring Mother...(Bernstein 1980, 70)

Trapped in this tangle, the process of individuation and thus development requires the confrontation of the reality and importance of the feminine, which will then result in its positive release.

The individuation process may be dependent on the "feminine hero" that will help the masculine confront itself and therefore confront the feminine. There is a sense that the "timing must be right" for this confrontation and growth to occur.

> The advent of the feminine hero, increasing numbers of men who are developing a not yet differentiated awareness of their deeper feeling nature, and the rapidly and dramatically changing sex roles in our society are all strong indicators that the "right time" may be upon us.
>
> Although the present resurgence of the archetype of the feminine has its negative aspect and truly threatens the masculine ego, it also represents an attempt to redress an imbalance in psychic forces which is equally threatening in destructiveness. Patriarchal castration is not vast improvement over matriarchal castration. The future of masculine individuation will be determined by the degree to which man consciously comes to grips with his own one-sidedness, a conscious realization of his fear of the feminine and a commitment to meet the feminine as he encounters it in woman and in himself....Perhaps it will be woman again, who, by challenging the status quo, will force the man into action. (Bernstein 1980, 76-77)

The case can thus be made that the "time is right" and that the individuals, particularly women, are (and have

been) in place to enable the positive feminine to emerge and share a balanced relationship with the masculine. This development is not characterized by the repression of the masculine, but by the elevation of the feminine to an equal status. By establishing this balanced relationship, the natural energy flow of life is directed between the masculine and feminine polarities toward growth. It is in this reciprocal flow of energy between the poles that unimpeded development takes place. In an organizational context, I believe that Deming's TQM philosophy can provide a vehicle for the release of the feminine. Consequently, it will be in the organization that the balanced relationship will be manifested. These will not be organizations as we have known them in the past, but will be organizations functioning through relatedness.

Conclusion

In this chapter, the tie between rationalism and the masculine principle, and the modern preference towards rationalism have been discussed. The importance of the masculine bias is of significance when placed in the context of the Jungian theoretical construct of psyche structure, development, and the role of the unconscious. According to this model, repression of the feminine creates a dynamic in which the negative, destructive feminine is energized and is

bent on destroying that which has repressed. Bernstein's explanation of how this dynamic has played out in modern Western organization reveals the importance of this dynamic to both individuals and organizations, and the need for appropriate responses.

While there are gender differences associated with all aspects of this research project, the masculine and feminine gender principles, which exist in both males and females, are the primary focus. These principles reflect different ways of encountering, understanding and responding to reality. It is these paradigmatic differences and their manifestations in organizational management that will be the focus of chapters four and five.

While this chapter has established the theoretical framework and the analytical technique for this project, chapter four and five will provide the analysis of the conventional management and TQM literatures for gender principle congruence.

CHAPTER 4

THE GENDER PRINCIPLE OF CONVENTIONAL MANAGEMENT

Introduction

As previously stated, the predominant paradigm of the Western world has been rationalism. As a consequence, management theories and techniques have exhibited the characteristics of rationalism and its corresponding masculine principle. In this chapter, the consistencies between the masculine principle and the tenets of conventional management will be identified. These consistencies will help illuminate the "sameness" of management theory, and why the many management schools and theories are only "variations of a theme."

The primary characteristics of the masculine perspective are a predisposition for objectification, or separateness, as an epistemological stance and a resultant tendency toward objectification. As discussed previously, the objectification of the self is rooted in the psychological development of the male ego, and is manifest in everything from the preference for rational structure (hierarchy) to the denial of feelings. In order to compare the masculine principle to management theory, the masculine view of authority, structure, feelings, and decision making, as determined by objectification, will be analyzed for

consistencies with conventional management.

Management Schools and the Masculine Principle

In 1986, the Academy of Management celebrated the centennial anniversary of modern management with a retrospective of management theory. According to the Academy, the primary question that management has faced is, "how can we increase productivity?". The responses to this question constitute the evolution of management theory. One of the observations made in the retrospective is that the body of management theory has been an accumulation and diversification of theories and techniques. Four basic approaches and their foci are identified:

1. Scientific Management--efficiency and streamlining of tasks--this is a bottom-up approach
2. Administrative Approach--improved managerial skills--this is a top-down approach
3. Human Relations Approach--consideration of worker--pay attention to and support the worker
4. Systems Approach--consideration of situation--the characteristics of the situation (task, worker, manager) will determine the appropriate techniques

Each of these schools of management made a distinctive approach to the attempted resolution of the productivity issue.

Although each of these classifications or schools of

management theory has its own focus, and specific tools and techniques, upon closer attention, the basic similarities and consistencies in all become apparent and are instructional. It seems interesting that the primary theorists and contributors to each are males and their theories and techniques represent what we might call a "man's game." This metaphor was the basis of Games Mother Never Taught Me to Play, a book designed to help women entering the management arena (the man's world) become more effective. The book emphasized gamesmanship, competitiveness, status, and one upmanship. During the 70s and 80s, many of the professional development activities for female professionals stressed the need to be more like men--that is to have male values, patterns of behavior, and attitudes. This is not an unimportant factor, since it can also be stated that management theories and techniques have an overwhelming grounding in the masculine principle. As we review the principles of the management schools, the consistencies with the masculine principle can be observed.

Characteristics of the Masculine Principle

The masculine principle creates a slanted perspective or bias in the way the world and its actions are seen or understood. In turn, conventional management wisdom reflects several characteristics of the masculine principle,

including:

- an epistemological stance of separateness and objectification
- a rule bound decisions/action rather than relationship (avoidance of feelings)
- an adversarial relationship that is reflected in status and communication patterns (one-up, or one-down)
- a picture of the role of the manager as one of control
- an objective knowledge

Separateness

The central issue of the masculine principle is its view of the individual, or person, as "separate." This understanding of "separateness" enables the very nature of experience to be structured by distinct boundaries. These boundaries will determine how the individual experiences his or her own being, the appropriate ways in which to encounter others and in which to base behavior, and a sense of a natural order. These perceptions, or understandings, of the natural order are manifested in organizational structures and management principles that promote individual behavior and objectivity.

Structure

The structural corollary of objectification and separateness is a rationally structured environment based on rules, and interpersonal action based on a one-up-one-down

pattern. This pattern evokes competitive, win-lose dynamic of interpersonal action, and devalues, or denies, relationship and collaboration as a pattern of interaction. The rule based, or hierarchical, structure has been the primary structural pattern of modern Western organizations.

The modern organization is grounded in the Weberian model of rational bureaucracy, with its emphasis on efficiency, hierarchical structure, and singular authority (control). (Denhardt 1984, 151) Max Weber described the function of modern officialdom as:

I. There is the principle of fixed and official jurisdictional areas, which are generally ordered by rules, that is by laws or administrative regulations.
II. The principles of office hierarchy and levels of graded authority mean a firmly ordered system of super- and subordination in which there is a supervision of the lower offices by the higher ones.
III. The management of the modern office is based upon written documents ("the files"), which are preserved in their original or draught form.
IV. Office management, at least all specialized office management--and such management is distinctly modern--usually presupposes thorough and expert training.
V. When the office is fully developed, official activity demands the full working capacity of the official, irrespective of the fact that his obligatory time in the bureau may be firmly delimited.
VI. The management of the office follow general rules, which are more or less stable, more or less exhaustive, and which can be learned. (Shafritz and Ott 1987, 81-82. Source: From Max Weber: Essays in Sociology edited and translated by H.H. Gerth and E. Wright Mills. Copyright 1946 by Oxford University Press,

Inc.: renewed 1973 by Hans H. Gerth.

The consistency of Weber's bureaucratic model with the masculine principle seems obvious. Weber's bureaucracy is a form of organization and administration in which the power of the organization is basically in the hands of officials with the requisite technical skills. These officials are responsible for carrying out their regular, or "official" duties, with the authority for their actions being bounded by rules. Knowledge is seen as "general rules, which are more or less stable, more or less exhaustive, and which can be learned." and represents a special technical expertise which the officials possess. (Weber, 958) This bureaucratic structure is thus a system of domination and control, through objective knowledge.

Weber's belief in the strength and superiority of bureaucracy is reflected in the following passage:

> The decisive reason for the advance of bureaucratic organization has always been its purely <u>technical</u> superiority over any other form of organization. The fully developed bureaucratic apparatus compares with other organizations exactly as the machine with the non-mechanical modes of production. Precision, speed, unambiguity, knowledge of the files, continuity, discretion, unity, strict subordination, reduction of friction and of material and personal costs- these are raised to the optimum point in the strictly bureaucratic administration...As compared with all collegiate, honorific, and avocational forms of administration, trained bureaucracy is superior on all these points. As far as complicated tasks are concerned, paid bureaucratic

> work is not only more precise but, in the last analysis, it is often cheaper than even formally unremunerated honorific services...(Weber, 973-74) Bureaucracy develops the more perfectly, the more it is "dehumanized," the more completely it succeeds in eliminating from official business love, hatred, and all purely personal irrational, and emotional elements which escape calculation. This is appraised as its special virtue by capitalism. (Weber, 975)

This passage is noteworthy for its praise of the "dehumanized" quality of bureaucracy: the more any type of relationship and feelings are denied the better. The nature of the organization anticipates that the individual is cut off from any of the representations of the unconscious--such as intuition, relationship, feelings. Hierarchical structure, characterized by status relationships, control, rational knowledge, departmentation, and a specifically structured pattern between workers and managers, not only denies the existence of the feminine principle, it is a powerful representation of the masculine principle.

Another management theorist, Henri Fayol, stated that the development of an organization is one of the basic functions of management, and that the organizational chart, based on hierarchy, authority, and control, is one of the five basic administrative tools for doing this. (Gulick and Urwick 1937, 105-106) In addition to Fayol's emphasis on structure, other management theorists viewed the hierarchical structure as natural and necessary for

organizations to be effective. (Gulick & Urwick 1937; Mooney & Reiley)

Frederick Taylor (1931) saw the importance of structure as ancillary to effective (or "scientific") management of an organization. He referred to the dominant structure of the time as "military organization" or a hierarchy of superiors and subordinates following the principle of unity of command. Taylor was convinced that this structure was counterproductive to effective operations and preferred a functional structure based on specializations at both the top and work levels of the organization.

> "Functional management" consists in so dividing the work of management that each man from the assistant superintendent down shall have as few functions as possible to perform. If practicable the work of each man in the management should be confined to the performance of a single leading function. (Taylor 1931, 99)

> Certainly the most marked outward characteristic of functional management lies in the fact that each workman, instead of coming in direct contact with the management at one point only, namely, through his gang boss, receives his daily orders and help directly from eight different bosses, each of whom performs his own particular function. Four of these bosses are in the planning room and of these three send their orders to and receive their returns from the men, usually in writing. Four others are in the shop and personally help the men in their work, each boss helping in his own particular line or function only. (Taylor 1931, 99-100)

> Thus, under functional foremanship, we see that the work which, under the military type of organization, was done by the single gang boss, is subdivided among eight men: (1) route clerks, 92)

> instruction card clerks, (3) cost and time clerks, who plan and give directions from the planning room; (4) gang bosses, (5) speed bosses, (6) inspectors, (7) repair instructions, and see that the work is done at the proper speed; and (8) the shop disciplinarian, who performs this function for the entire establishment. (Taylor 1931, 104)

Taylor saw the necessity for the functional foremen to have a functional superior whose roles were: (1) teach and support the subordinate bosses, and (2) smooth out difficulties between the functional bosses. (Taylor 1931, 108) In this new division of management and labor, management is assigned the responsibility for rationally discovering the "best way." (Taylor 1931 SHOP MANAGEMENT, p x-xi) While this is a variation from the bureaucratic model and its unity of command/control, it has the essential characteristics of hierarchy. The structure of superior and sub-ordination is applied across a functional grouping and with multiple superior-subordinate relationships. Additionally, Taylor's description of the responsibilities of the functional bosses indicates the preferences for definable job boundaries. As we shall see later, the notion of a system, in Deming's terms, and the relationship at every level inherent in a system, is contradictory to Taylor's structural model.

Essentially what we see here is a difference in working direction, and that the contributions of Weber, Taylor and Fayol are essentially complementary. (Gulick & Urwick 1937,

118) Weber and Fayol worked from the top-down, where Taylor worked from the bottom-up. The understanding of structure by conventional management theorists is as a hierarchical, rule-based system in which rational decision making will guide the efforts of workers.

Authority

Kathleen Jones (1987) sees the traditional masculine notion of authority as a system of conflict resolution where decision making is less consensus building and more "a process of adjudicating competing private claims of self-interest." (154) Authority is hierarchical, rules based, and dispassionate.

> The idea of authority as traditional hierarchy makes sense so long as we accept on faith that the need for an ordered, efficient social system takes precedence over any other form of social organization. But this may be a variable condition. The identification of authority with some form of hierarchy is based, although not intentionally, on what Carol Gilligan has called a peculiarly male approach to decision-making: the willingness to sacrifice relations to others in the face of established rules; or, to put it differently, to exchange the uncertainty of human relationship for the certainty or rules. (Jones 1987, 156-157)

The masculine notion of an abstract, rule based authority by which the individual, as separate from the object or situation, can make a rational decision is the preference of Western culture.

The term authority has two different meanings that can be traced in political philosophy: (1) "...is always understood a right of doing any act; and done by authority, done be commission, or license, from him whose right it is." (Peters, 146) and (2) "...is the ability of a man to get his proposals accepted." (Peters, 147) (references de Jouvenel in Sovereignty). The former is known as authority as *de jure*, or a right; the later is known as authority as *de facto*. Both concepts of authority, grounded in the masculine principle's separation of self (object) and the reliance on an objective means of acting, are based on the individual's relinquishing his or her judgement to someone else. (Friedman, 128-129) The masculine concept of authority is part of management's conventional wisdom.

Max Weber identified three types of legitimate authority: (1) rational, (2) traditional, and (3) charismatic. Rational authority is based

> "...on a belief in the "legality" of patterns of normative rules and the right of those elevated to authority under such rules to issue commands (legal authority)" .... In the case of legal authority, obedience is owed to the legally established impersonal order. It extends to the persons exercising the authority of office under it only by virtue of the formal legality of their commands and only within the scope of authority of the office." (Weber, in Flathman ed., 105)

This is the authority of bureaucracy. The authority lies in the position and not the person, is seen as impersonal, and

is rule bound. As Gilligan states, in the male view there is a willingness to ignore or deny relationship for the "certainty of rules." The acceptance of authority is based on acceptance of a preconception of order and structure. Weber explained that under legal authority

> The organization of offices follows the principle of hierarchy; that is, each lower office is under the control and supervision of a higher one. There is a right of appeal and of statement of grievances from the lower to the higher. Hierarchies differ in respect to whether and in what cases complaints can lead to a ruling from an authority at various points higher in the scale, and as to whether changes are imposed from higher up or the responsibility for such changes is left to the lower office, the conduct of which was the subject of complaint. (Weber, 107)

Richard Friedman explains that the concept of "in authority" is justified by the problematic situation of the need for co-ordination.

> This predicament occurs whenever men cannot agree on what is to be done, so that, to avoid chaos, there must be agreement about who is to decide what is to be done. That is, the predicament occurs wherever there is a situation in which a collection of individuals wish to engage in some common activity requiring a certain degree of coordinated action but they are unable to agree on what the substance of their common behavior should be. (Friedman, 140)

This is consistent with the masculine principle. The self as separate creates an order of hierarchy in which position determines authority. This position denies the ambiguity of relationship as seen in a feminine perspective like Mary Parker Follett's "law of the situation."

As the bureaucratic structure became the model for modern organizations, this concept of traditional authority and the coordination that it implies was accepted. Although there was not collaboration, there was consistency in the principles, techniques, and methods of early management theorists such as Taylor, Fayol, and Weber.

While Chester Barnard explained a different concept of authority tied to the notion of subordinate acceptance, the essence of his concept is compatible and consistent with the broad notion of authority. As stated previously, the concept of authority requires a relinquishing of personal judgement. Barnard's concept of authority assumes that there are limits to the relinquishing of personal judgement--zones of indifference--beyond which the individual will not accept the authority of the superior. Within this zone of indifference, the individual will obey the command. While this identifies the limits of authority within organizations, it does not negate the hierarchical structure and the traditional authority associated with the structure.

Modern organizations have evolved into complex structures of line and staff positions, multiple forms of departmentation, and varying degrees of specialization. Within these structures, *de jure* and *de facto* authority rely on other members of the organization relinquishing their judgement and accepting the decision or order. This

structure and notion of authority relies on the impersonal application of rules, and decision or command as an abstract action separated from the individuals. The concern is not with relationship, but with the rational application of the rules of the organization. While many contemporary managers may hesitate to use the term "authority over," it is a fact of organizational life where hierarchical structure becomes the bottom line, or the last resort, in decision making and problem solving.

Feelings and Decision Making

The avoidance of feelings is a characteristic of the masculine principle that may be one of the most observable influences on rationalism. This issue is can be seen in conventional management's stance on decision-making. Decisions should be based on facts and systematic analysis of the facts. Accordingly, there is no room for or acceptance of the intuition or feelings.

> ...the seeker after knowledge, at least since Descartes, is a <u>separated self</u> who remains detached in order to know and control. Knowledge requires disconnection from the disorderly, feminine field of observation to avoid muddying the results with bias (Bordo, 1987). The cultural masculinity of this mode of knowing, which aims to prevent contamination by removing from the research process all traces of the individual scientist, is implied in the characterization of its products as <u>hard data</u>, as distinct from the <u>soft data</u> acquired by interactive procedures such as interviewing or participant observation....

> ...only knowledge gained by means of detachment from the field of observation is seen as qualifying for the term scientific--only this is really knowledge. (Stivers 1993, 39)

This rationally based knowledge would be void of all emotions, and thereby made superior.

> In addition, being impartial means being ruled by reason--in the sense not of simply having reasons but of reducing "objects of thought to a common measure, to universal laws" (61) Such reason entails being unaffected by feelings; "only by expelling desire, affectivity and the body from reason can impartiality achieve its unity' (62). In contrast, decision based on sympathetic understandings, on caring, are defined as sentimental. (Stivers 1993, 41-42)

The masculine preference for objective knowledge--a knowledge that denies feelings--is at the core of conventional management theory. Even the name given to the first major management era, Scientific Management, reflects the role of masculine knowledge in management theory. Weber proposed a "dehumanized" bureaucracy, based on an "impersonal order" that would be devoid of human emotions and feelings, and would function upon learned rules (knowledge). Taylor posited the benefits of objective knowledge that could be discovered by scientific analysis.

This notion of objective facts is seen again in Herbert Simon's treatise on decision making in organizations. Simon described a systematic approach to decision-making that would rely on the objective gathering and analysis of data (hard data) for managers to utilize. Decision making,

according to Simon, is a systematic process of objectively evaluating alternatives to determine the most workable decision.

> The task of decision involves three steps: (1) the listing of all the alternative strategies; (2) the determination of all the consequences that follow upon each of these strategies; (3) the comparative evaluation of these sets of consequences. (Simon 1976, 67)

In this decision making process, Simon distinguishes between facts and values.

> Factual propositions are statements about the observable world and the way in which it operates. In principle, factual propositions may be tested to determine whether they are <u>true</u> or <u>false</u>--whether what they say about the world actually occurs, or whether it does not....
>
> The argument, briefly, runs as follows. To determine whether a proposition is correct, it must be compared directly with experience--with the facts--or it must lead by logical reasoning to other propositions that can be compared with experience. But factual propositions cannot be derived from ethical ones by any process of reasoning, nor can ethical propositions be compared directly with the facts--since they assert "oughts" rather than facts. (Simon 1976, 45-46)

While not denying the existence of, or the impact of, values, Simon suggest a decision making process that focuses on empirically verifiable facts.

> One implication of the "fact/value dichotomy" is that the investigator should focus on the "facts" of a situation, ..., the investigator sets aside the "value" elements, perhaps to be analyzed at another time or perhaps, as often happens, not to be dealt with at all. (Harmon & Mayer 1986, 141)

In Simon's decision making process, the elements of the masculine principle are evident: its preference for rationality (reasoning) over intuition or feelings; its preference for boundedness; its objectification of nature; its preference for a linear way of knowing.

The Individual

The masculine preference for understanding the person as an individual, separate from others and the environment, has been a constant in management theory. The early theorists were concerned about the specific task, as the unit of analysis in work processes, and how the individual worker would perform the task. The assumption of the individual led naturally to techniques of quotas, work standards, pay systems, and individual performance appraisal.

In the 1920s, the research foundations for an apparently radical management approach were being laid. In an attempt to determine the optimum physical environment for worker productivity, researchers in the Hawthorne Studies identified the positive connection between management attention and worker attitude on productivity. The Human Relations School that evolved from the Hawthorne Studies shifted attention from the task and management skills to the importance of the worker and worker attitudes. However,

this is a minor shift in attention--away from the individual task to individual needs. And with this shift, the purpose of management remained instrumental.

> Knowledge of employee needs, in other words, serves the instrumental needs of the organization, rather than the developmental needs of the employee. (Harmon & Mayer 1986, 207)

Although the Human Relations School certainly attended to the human factor of organizations, it was approached within the confines of the masculine principle. This preferred way of encountering the world can be traced back to the effects of the "male wound."

> The wound not only fuels the male imagination,...but also constrains it. For although, superficially, the forms of scientific and philosophical thought are various, their underlying preoccupations are few. The 'male' man is evidently drawn to the dramas of purity and cleansing, of force, and of the penetration of mysteries. Uniting such concerns, invariably, there is a preoccupation with the idea of order: of structures and of boundaries which define and limit. More specifically, and especially when the subject matter is human, the processes of the male imagination appear, time and again, to come to rest on dualities and schisms, and on the task of resolving these by the power of reason. (Hudson & Jacot, 117)

Thus, whether the focus is on the task, the technique, the physical environment, or the needs of the individual worker, the masculine bias towards boundedness and rationality are the paradigmatic grounding. The power of reason would reveal knowledge and provide the means of accomplishing the goals of management.

This model was and is used by management in an instrumental way to elicit a desired level of performance from the worker. Management is seen as in the position of knowing or understanding worker needs, thus is able to manipulate the worker.

One of the early emphases of the Human Relations approach was in the application of psychological theories of motivation to the worker. Of the various motivational theories, A. H. Maslow's theory of motivation has been one of the most widely accepted models.

Maslow developed the theory of the "hierarchy of needs," which identifies various categories of individual needs and the ordered relationship of these needs to each other.

> There are at least five sets of goals, which we may call basic needs. These are briefly physiological, safety, love, esteem, and self-actualization. In addition, we are motivated by the desire to achieve or maintain the various conditions upon which these basic satisfactions rests and by certain more intellectual desires.
>
> These basic goals are related to each other, being arranged in a hierarchy of prepotency. This means that the most prepotent goal will monopolize consciousness and will tend of itself to organize the recruitment of the various capacities of the organism. The less prepotent needs are minimized, even forgotten or denied. But when a need is fairly well satisfied, the next prepotent ("higher") need emerges, in turn to dominate the conscious life and to serve as the center of organization of behavior, since gratified needs are not active motivators. (Maslow 1943, 370-396)

According to Maslow's motivational theory, it is management's responsibility to determine what was needed to fulfill each of the types of needs and to provide such fulfillment so that the worker could be motivated toward higher productivity and performance.

Douglas McGregor understood the deficiencies of conventional management. When referring to his classification of ego needs, he states:

> The typical industrial organization offers few opportunities for the satisfaction of these egoistic needs to people at lower levels in the hierarchy. The conventional methods of organizing work, particularly in mass-production industries, give little heed to these aspects of human motivation. If the practices of scientific management were deliberately calculated to thwart these needs, they could hardly accomplish this purpose better than they do. (McGregor 1957)

McGregor expanded the general individual motivational theory for application to organizations by explaining the basic assumptions that managers have about people and the impact of these assumptions on management style. Theory X and Theory Y reflect two different sets of assumptions about people. Theory X, which represents conventional management, assumes that individuals do not like to work and must be coerced either by economic reward or by fear of punishment. These assumptions create an autocratic approach to management.

1. Management is responsible for organizing the elements of productive enterprise--money,

materials, equipment, people--in the interest of economic ends.

2. With respect to people, this is a process of directing their efforts, motivating them, controlling their actions, modifying their behavior to fit the needs of the organization.
3. Without this active intervention by management, people would be passive--even resistent--to organizational needs. They must therefore be persuaded, rewarded, punished, controlled--their activities must be directed. This is management's task. We often sum it up by saying that management consists of getting things done through other people. (McGregor 1957)

Theory Y assumes that people like work and responsibility, and want to be engaged in work. These assumptions create a more participative approach.

1 Management is responsible for organizing the elements of productive enterprise--money, materials, equipment people--in the interest of economic ends.
2. People are not by nature passive or resistant to organizational needs. They have become so as a result of experience in organizations.
3. The motivation, the potential for development, the capacity for assuming responsibility, the readiness to direct behavior toward organizational goals are all present in people. Management does not put them there. It is a responsibility of management to make it possible for people to recognize and develop these human characteristic for themselves.
4. The essential task of management is to arrange organizational conditions and method of operation so that people can achieve their own goals best by directing their own efforts toward organizational objectives. (McGregor 1957)

Again, the role of the manager is to figure out what will motivate the worker and then to use the appropriate

techniques to accomplish the organizations goals. The individual is viewed in isolation, or separate, rather than as in relationship with others in the organization.

McGregor's prescriptions for improving worker performance include decentralization, delegation, job enlargement, participation, and performance appraisal. While his method of performance appraisal includes self-evaluation, it was based on the establishing of measurable targets and self-evaluation of performance toward these targets. Again, there is the perception of the individual's control of the environment, isolation from other parts of the system, and belief that variation is abnormal.

While the attention is certainly on the worker, this approach is just as masculine biased as the Scientific Management or Administrative approaches. There is no connection made with the worker, only an analysis of management attitudes about the worker (the object) and the correlation of how these attitudes will influence the manager's style. Improved performance will be the result of the knowledgeable manager's manipulation of the worker and work situation. Participation by the worker is still hierarchically controlled and instrumental. Because of this separation, both managers and workers are viewed instrumentally, each can be analyzed, understood, and manipulated toward accomplishing organizational goals.

Herzberg developed the motivator-maintenance model, in which he distinguished between intrinsic and extrinsic factors and their impact on performance and behavior. These models did not take into consideration the differences in the individuals and how these differences in motivations were accounted for. Victor Vroom, Peter Drucker, and McClelland each developed different models to account for and adjust for the individual differences. Vroom's Expectancy Model requires management to identify the individual's values (what they want), the ratio of performance and reward (Was the effort worth it?), and the individuals expectation of successfully accomplishing or acquiring their values. Peter Drucker involved individuals in the development of objectives which would be used to evaluate their performance (participation). McClelland described three types of needs (power, affiliation, and achievement) that reflect individual differences in the organization.

In all of these management theories and contributions, the same patterns of masculine characteristics can be seen at their root level. In each, the individual is viewed in isolation or, as separate, and the emphasis is on the point of view of the manager, who maintains knowledge and control of the situation. Needs and means of satisfying needs are determined by management. Workers are the object of

managerial technique and technology. Workers, tasks, knowledge can all be separated, manipulated, and reassigned in an on going attempt by the manager to increase productivity. Rules and reason are still the basis of interaction, now they are rules about people and behavior. While this is apparently a "kinder, gentler" approach to management, its grounding is in a masculine perspective and is thus limited by its boundaries.

Conclusion

At the beginning of this chapter, I stated that the various conventional management theories and techniques are "variations on a theme." By this, I mean that all have evolved from a culture that is highly biased toward the masculine perspective, and thus reflect the same paradigmatic view of the world. In this chapter, I have reviewed the elements of the masculine principle and how they are consistent with conventional management theory. These consistencies are evident in, not only early theory but in each of the major schools that has developed since the early phase. The innovations of each school, and each theory, are grounded in the same epistemological stance, and thus, evoke superficial variations but essentially similar results rather than true improvement.

While there is no shortage of techniques or tools, the

sameness of these is of great concern. In order to make any significant improvement in the functioning of organizations, this consistent paradigmatic grounding and the need for an alternative paradigm must be understood. Management theory that is grounded in the counter-balancing feminine principle may provide a truly innovative approach to organizations.

CHAPTER 5

THE GENDER PRINCIPLE OF TQM

Introduction

In this chapter the essential characteristics of Deming's TQM philosophy will be identified, the characteristics that are in opposition to the masculine principle will be identified and explained, and the characteristics that are consistent with the feminine principle will be identified and explained.

Essentials of Deming's TQM Philosophy

As previously stated in the literature review, Deming's philosophy is just that, a philosophy, and not a collection of techniques to be applied to organizations. It is comprised of various components, all with the goal of continuous quality improvement. These components include the fourteen principles, the deadly diseases, the obstacles to management, profound knowledge, systems, psychology, and a variety of statistical tools. These components constitute a holistic approach that transforms conventional management as we have known it. This transformation creates new roles and relationships for both workers and management that relies on the power of knowledge and cooperation rather than traditional authority.

The belief that variation is both natural and predictable is fundamental to Deming's philosophy. Deming's work is grounded in Walter Shewhart's early studies on statistical variation and process control. As described previously, a process will exhibit performance variations that will be either system variations or special variations. These variations can be determined and classified through the use of such devices as "run charts" and "control charts." The system variations can be "mined", as Juran says, for improved performance. Special variation must be accepted as natural and not punished as we have done in the past.

In this environment, workers are the source of information and knowledge about the process and are not afraid of identifying defects. Workers also become directly involved in the decisions of how to improve system performance. Thus they become empowered and their relationship with management and the organization changes to one of cooperation. In this environment, the manager's role shifts from one of control and reward or punishment to one of leadership.

> The job of management is not supervision, but leadership. Management must work on sources of improvement, the intent of quality of product and of service, and on the translation of the intent into design and actual product. The required transformation of Western style of management requires that managers be leaders. Focus on

> outcome (management by numbers, MBO, work standards, meet specifications, zero defects, appraisal of performance) must be abolished, leadership put in place. (Deming 1982, 54)

The focus of leadership is not for short-term profit and short-term costs minimization, but is toward long-term survival, constantly improving quality, and a continuously increasing standard of living for society.

This shift in management perspective must create new relationships with customers, suppliers, and competitors. Rather than the belief that competitive, adversarial relationships benefit organizations, this new philosophy looks at the long-term benefits of cooperative relationships between all components. It is believed that long-term, cooperative relationships with suppliers results in stable, high quality inputs. Rather than focus on low bid contracts that result in long-term costs that outstrip any short-term savings, the long-term costs go down as suppliers are able to operate in a stable environment.

> Price has no meaning without a measure of the quality being purchased. Without adequate measures of quality, business drifts to the lowest bidder, low quality and high cost being the inevitable result. (Deming 1982, 32)

> ...A long-term relationship between purchaser and supplier is necessary for best economy. How can a supplier be innovative and develop economy in his production processes when he can only look forward to short-term business with a purchaser? (Deming 1982, 35)

Fourteen Principles

The foundation of Deming's philosophy is his famous list of fourteen principles:

1. Create constancy of purpose toward improvement of product and service, with the aim to become competitive and to stay in business, and to provide jobs.

2. Adopt the new philosophy. We are in a new economic age. Western management must awaken to the challenge, must learn their responsibilities, and take on leadership for change.

3. Cease dependence on inspection to achieve quality. Eliminate the need for inspection on a mass basis by building quality into the product in the first place.

4. End the practice of awarding business on the basis of price tag. Instead, minimize total cost. Move toward a single supplier for any one item, on a long-term relationship of loyalty and trust.

5. Improve constantly and forever the system of production and service, to improve quality and productivity, and thus constantly decrease cost.

6. Institute training on the job.

7. Institute leadership. The aim of supervision should be to help people and machines and gadgets to do a better job. Supervision of management is in need of overhaul, as well as supervision of production workers.

8. Drive out fear, so that everyone may work effectively for the company.

9. Break down barriers between departments. People in research, design, sales, and production must work as a team, to foresee problems of production and in use that may be encountered with the product or service.

10. Eliminate slogans, exhortations, and targets for the work force asking for zero defects and new

levels of productivity. Such exhortations only create adversarial relationships, as the bulk of the causes of low quality and low productivity belong to the system and thus lie beyond the power of the work force.

11. Eliminate work standards (quotas) on the factory floor. Substitute leadership.
Eliminate management by objectives. Eliminate management by numbers, numerical goals. Substitute leadership.

12. Remove barriers that rob the hourly worker of his right to pride of workmanship. The responsibility of supervisors must be changed from sheer number to quality

Remove barriers that rob people in management and in engineering of their right to pride of workmanship. This means, abolishment of the annual or merit rating and of management by objectives.

13. Institute a vigorous program of education and self improvement.

14. Put everybody in the company to work to accomplish the transformation. The transformation is everybody's job.
(Deming 1982, 1986)

Systems

Essential to the effectiveness of continuous improvement is a cooperative relationship between all system components existing within a competitive environment.

> ...We live in a society dedicated to dividends, organization, decision, orders from top to bottom, confrontation (every idea put forth must win or lose), and all-out war to destroy a competitor be he at home or abroad. Take no prisoners. There must be winners, and there must be losers. This may not be the road to better material living.
> (Deming 1982, 149)

Deming's notion of "system" is much more comprehensive than that of traditional management and underpins his theory that cooperation, or cooperative relationships, is essential for the expansion of material well being and for long-term business survival.

> If economists understood the theory of a system and the role of cooperation in optimization, they would no longer teach and preach salvation through adversarial competition. They would, instead, lead us into optimization of a system, in which everybody would come out ahead. (Deming 1992, 47)

> The aim suggested here is optimization of the system through time. Interaction between the components of the system, specifically cooperation and competition, must be evaluated in light of the aim. Efforts by competitors, acting jointly or together, aimed at expanding the market and to meet needs not yet served, contribute to optimization for all of them. When the focus of cooperation between competitors is to provide better service to the customer (e.g., lower costs, protection of the environment), everyone comes out ahead.

> The boundary of the system described in Figure 6 may be drawn around a single company, or around an industry, or as in Japan in 1950, the whole country. The bigger be the coverage, the bigger be the possible benefits, but the more difficult to manager. The aim must include plans for the future. (Deming 1992, 40)

William W. Scherkenbach reinforced this idea of cooperation within an environment of competition.

> American management must still learn that in order to compete, they must learn to cooperate. (Scherkenbach, 1991)

System of Profound Knowledge

Profound knowledge--knowledge for management of transformation--is necessary for the transformation of American organizations. Profound knowledge consists of four interdependent parts:

- Appreciation for a system
- Knowledge about variation
- Theory of knowledge
- Psychology (Deming 1992, 61-62)

A system is defined as:

> ...an interconnected complex of functionally related components that work together to try to accomplish the aim of the system....A system must have an aim....that must be clear to everyone in the system. (Deming 1992, 62)

Knowledge of the interrelationships of system components and the people that work in the system is necessary for management to lead effectively. The obligation of each component is to contribute its best to the system and not maximize its own performance. (e.g. a loss leader that increases business/profit) (Deming 1992, 66)

The knowledge of variation establishes variation as natural and occurring in both stable and unstable processes. As discussed previously, there are two types of variation, system and special, and each type requires a different response or action. "System" variations are a natural aspect of the system and cannot be attributed to any special action. "Special" variation is the result of an uncommon

occurrence or possibly a specific group of workers. It is the understanding of these types of variation that will help management pursue appropriate action and will also help managers avoid inappropriate action.

Theory of knowledge delineates between knowledge and information, and provides the understanding that management is prediction.

> The theory of knowledge teaches us that a statement, if it conveys knowledge, predicts future outcome, with risk of being wrong, and that it fits without failure observations. (Deming 1992, 69)

Psychology focuses on the understanding of people and behavior.

> Psychology helps us to understand people, interaction between people and circumstances, interaction between customer and supplier, interaction between teacher and pupil, interaction between a manager and his people and any system of management. (Deming 1992, 73)

While accepting the importance of both extrinsic and intrinsic motivators, intrinsic tend to be the most important. Over emphasis on extrinsic motivation may result in the phenomena of overjustification and its resultant demoralization. (Deming 1992, 73-75)

The general principles and specific techniques of Deming's philosophy will be critically analyzed to reveal their ontological grounding.

Aspects of TQM in Contradiction to the Masculine Principle

The masculine principle has previously been characterized as having a preference for and reliance on a world view that tends to:

- Be grounded in objectification as its paradigmatic/axiological stance for encountering reality

Corollary to this axiological stance the masculine preference tends to:

- Be most comfortable in rationally structured settings, i.e. settings in which a system of rules and rule based authority can determine action
- View environments in adversarial terms, (i.e. as to some extent hostile) and seeks to establish control over the environment
- De-emphasize feelings to the point that it frequently appears to be phobic about relationship
- Prefer a competitive relationship that yields a one-up-one-down position for the interacting parties

Several components of Deming's philosophy are in direct contrast or opposition to the masculine principle. In this section, some of Deming's quality improvement principles that are in direct opposition to the masculine principle will be identified and discussed. The TQM principles to be analyzed are: the role of leadership, the orientation to customers and suppliers and society, the opposition to MBO

as currently practiced, the opposition to individual performance appraisal.

Grounding in Objectification

Objectification refers to a paradigmatic stance in which the external existence of reality allows the human person to exist separately and to be capable of consciously influencing or acting on the environment. As stated previously, the masculine tendency toward objectification results from the dynamics of the "male wound."

> By contrast, men develop a self based more on denial of relation and on a more fixed, firmly split, and repressed inner self-object world: "the basic masculine sense of self is separate." (Chodorow 1978, 119)

This sense of "self as separate" has been institutionalized in the masculine dominated society as exemplified by the preferences for objective science, individualistic political systems and theories, and the resultant hierarchical structures of organizations:

> ...all find their psychological roots as defensive institutionalizations of a rigid separateness needed by the masculine psyche and are built on a latent structure of anger and repudiation of women. (Chodorow 1978, 119)

The masculine predisposition towards "self as separate" is reflected in:

- self-objectification

- objectification of the unconscious
- overwhelming preference for seeing the human person as an individual bounded by their skin

By self-objectification, I mean the externalization of the individual in which the individual becomes an instrumental tool for the accomplishment of, or conquering of, a goal or action. The archetypal image, seen in both public and private sectors, is "the warrior" who faces off with and conquers the enemy. In the private sector during the past several years, there have been various accounts of the "white knight" rescuing a beleaguered organization under siege from a hostile takeover attempt. In the public sector, Ross Perot took on the persona of the "warrior" in his presidential bid as he did battle with the Democratic and Republican Parties, the other candidates, the bureaucracy, the courts, crime, economic woes, etc. According to Perot, his willingness to engage these problems and institutions was not for personal reward, but was to solve the nation's problems and save it from impending doom. This modern day warrior would bring all of the technologies available to the analysis and resolution of national problems, which according to this view, are definable in quantitative terms, can be manipulated by applying various tools, and in the end can be conquered. Thus the dragon can be slain by the individual.

In, Out of the Crisis, Deming (1986) captures the very

essence of objectification and its manifestations in organizations.

> People whether in management or on the factory floor have become, to management, a commodity. I met with 40 skilled tradesmen in a company that is doing well. Their main complaint was that they do not know till Thursday of any week whether they will work the next week. 'We are a commodity,' one of them said. That is the word that I had been seeking--commodity. The management may hire them at the price posted, or may not, depending on need. If not needed next week, they go back on the market. (Deming 1986, 77)

A second way that objectification is reflected is through the objectification of the unconscious. The masculine seeks to deny or avoid any evidence of a spontaneous unconscious or intuition. The masculine demand that action occur at the conscious level is certainly reflected in Western preference for "objective" science and the denial of intuitive knowledge.

> ...the seeker after knowledge, at least since Descartes, is a <u>separated self</u> who remains detached in order to know and control....
>
> A number of feminist scholars argue that, because in Western society male children tend to equate self-development and maturity with the attainment of autonomy and separation from their mothers (Chodorow 1978; Gilligan 1982) and because men still largely remain in control of social processes, only knowledge gained by means of detachment from the field of observation is seen as qualifying for the term <u>scientific</u>--only <u>this</u> is <u>really</u> knowledge. (Stivers 1993, 39)

A third reflection of the masculine bias toward objectification is the overwhelming preference for seeing

the human person as an individual bounded by its skin. It is the individual that needs to be fed, clothed, sheltered; that responds to an incentive system; is rewarded or punished; is a component in the production process to be manipulated or replaced. In organizations, the self-contained individual is the unit of analysis for establishing job descriptions, pay and incentive systems, performance appraisals, and innovation programs. Even when there is attention to the group, it is typically seen as an association of individuals whose total is equal to the sum of its parts. Little attention is given to the synergy and evocative nature of groups and systems and little value is attributed to the contextual individual.

In its attempt to accomplish organizational goals, management has embraced various techniques to manipulate the worker.

> ...but are helpless to face the problems of people. They shrug off problems of people with crab walk and wishful thinking, hoping that the problems will go away. They establish employee involvement, employee participation, quality of work-life, all as smoke screens. All these hopes wither away in a few months where the management is not ready to take action on suggestions. (Deming 1986, 78)
>
> What happens? In my experience, people can face almost any problem except the problems of people. They can work long hours, face declining business, face loss of jobs, but not the problems of people. Faced with problems of people (management included), management, in my experience, go into a state of paralysis, taking

> refuge in formation of QC-Circles and groups for EI, EP, and QWL (Employee Involvement, Employee Participation, and Quality of Work Life). These groups predictably disintegrate within a few months from frustration, finding themselves unwilling parties to a cruel hoax, unable to accomplish anything, for the simple reason that no one in management will take action on suggestions for improvement. These are devastatingly cruel devices to get rid of the problems of people. There are of course pleasing exceptions, where the management understand their responsibilities, where the management participates with advice and action on suggestions for removal of barriers to pride of workmanship. (Deming 1986, 85)

Rather than objectifying workers, customers, suppliers, and society in general, Deming sees these components as part of a system that can only be understood in relationship and context, and in which the welfare of all must be of concern.

Analogues in TQM

Components of Deming's philosophy stand in direct contrast to the objectification of the masculine principle as exemplified by:

- Emphasis on the group
- Emphasis on leadership versus the manager as controller
- Acceptance of the Gaussian curve
- Opposition to contracting with the individual through such techniques as incentive systems, performance appraisals, etc.

Emphasis on the Group: One of the most telling

characteristics of Deming's philosophy in relationship to the masculine principle of objectification and preference for the individual is his reliance on the group to define a process. For Deming, it is only in the context of a group consisting of customers and suppliers (both internal and external) that any process can be defined. It is the combined knowledge and perceptions of the various members of the system that will allow the actual process to be identified. If there were an "objective" process, an individual would be able to determine accurately the process for all the components of the system.

> A single person using quality improvement practices can make a big difference in an organization. But rarely does a single person have enough knowledge or experience to understand everything that goes on in a process. Therefore, major gains in quality and productivity most often result from teams--a group of people pooling their skills, talents, and knowledge. (Joiner 1988, 2-7)

Emphasis on Leadership: In addition to reliance on the group, Deming focuses attention on leadership and the role of management. The role of management and the leader shifts from that of instrumental monitor and controller to one of evoking the energy, skills, and knowledge of the worker. Deming's seventh principle is "adopt and institute leadership." As he explains:

> ...The job of management is not supervision, but

> leadership. Management must work on sources of improvement, the intent of quality of product and of service, and on the translation of the intent into design and actual product. (Deming 1986, 54)

The aim of the leader, or leadership, is to improve the system and not to monitor and control the worker.

> The job of management is to replace work standards by knowledgeable and intelligent leadership....Wherever work standards have been thrown out and replaced by leadership, quality and productivity have gone up substantially, and people are happier on the job. (Deming 1986, 75)

> ...The aim of leadership would be to improve the performance of man and machine, to improve quality, to increase output, and simultaneously to bring pride of workmanship to people. Put in a negative way, the aim of leadership is not merely to find and record failures of men, but to remove the causes of failure: to help people to do a better job with less effort. (Deming 1986, 248)

Under this notion of management and leadership, the leader does not singularly monitor, control, and make decisions. The leader creates an environment in which the workers are able to improve quality and have pride by evoking their energy for continuous improvement. Workers define the system, track the performance, determine whether or not the system is stable, and if the system is not stable, try to determine causes and suggest corrective action. In this environment, it is not the manager that monitors individual performance and takes isolated action, but it is the empowered workers that will provide knowledge of the system and the basis for action.

Additionally, it is not the leader that motivates, rewards, or punishes the individual worker. It is the worker's intrinsic motivation, joy of learning, and pride of workmanship that will energize the individual and group. Thus, the manager, as leader, is a facilitator and counselor, aiding and enabling the process of continuous improvement. As discussed in Chapter Two, the focus of conventional management has been "how to get more productivity from the individual" with the assumption that it was the sum of individual efforts that determined output. While certainly acknowledging the individual, Deming's notion of leadership is radically different: it is the individual in an interdependent network interacting with the system that will determine performance. And, it is management that bears the responsibility for the system.

Training: Related to leadership is training. For Deming, training is a critical component of maintaining one of the most important and renewable assets, people. The response of the worker to training is not limited to performance within the system, but includes a "joy in learning" and "pride of workmanship," and satisfaction which will continue to create an "unknowable" value to the organization. It is these results that render the value of training impossible to determine.

> ...money spent on training, retraining, and education does not show on the balance sheet; it does not increase the tangible net worth of a company. (Deming 1986, 53)

Deming places enormous value on worker feeling, "unknowable" costs, and the belief that the whole is greater than the sum of the individual components.

Gaussian Curve: As mentioned previously, attention is focused on the system and whether or not the system is stable. Deming's statistical analysis of systems, determination of stable and unstable processes, and understanding of appropriate action are grounded in the acceptance of variation as reflected in the Gaussian Curve.

There will be variation in any process and the cause of the variation can be determined to be either "special" or "common." Using run charts and the measure of standard deviation, the lower and upper control limits of a process can be determined. Based on these measurements, any variation that falls within these limits is considered "normal" and the results of the system rather than the individual or any other special circumstance or cause. Because these variations are normal, it would be senseless and actually harmful to intervene in these types of variations. The adjustment of a variation that is within a stable system is called "tampering" by Deming and results in

greater and greater variation. As discussed previously, it is the system or common variation that will be the basis of quality improvement. Rather than the elimination of variation, TQM accepts variation and is interested in bringing a system into control.

Contracting With the Individual: Just as it is harmful to "tamper," it is inappropriate to reward or punish an individual operating within the system. The use of MBO, merit pay, pay for performance, quotas, etc. as management techniques to influence or improve individual performance denies the existence and impact of a system. According to Deming, it is not the individual, but the system that determines performance. To associate the success or failure of the system to an individual attributes to the individual capacities that he or she do not possess. Application of individual reward techniques, such as merit pay, creates morale problems for both recipients and those denied reward. (This topic is covered more thoroughly in the sub-section on performance appraisal.)

Preference for Rationally Structured Settings

As previously discussed, the masculine perspective has a preference for settings and organizations that are structured by a system of "rule based authority." Within

organizations, work relationships, responsibilities, and roles can be, and should be, clearly defined. In this structured system, goals can be established, resources can be allocated, outcomes can be measured, and responsibility can be assigned.

While rules help to rationalize the work environment and enable management and workers to determine what actions to take in any particular situation, the roles tend to become "rule bound" or "rule determined."

> Deming (1986) and Wilson (1990) agree that bureaucratic organizations overly emphasize rules, laws, and organizational structure as the means to effect change or accomplish goals. In the process they often lose sight of what the agency is doing to satisfy its clients. In some cases it appears almost pathologically that the regulations and procedures of the organization become "the customer" that the workforce mistakenly is trying to satisfy. (Harrison & Stupak, 1993, 426)

The proliferation of rules and the administrative manuals in which they are recorded are legendary. It appears to some that the government has made an art out of rule-making in its attempt to rationalize and control the work setting. As decision making situations arise, the organization promulgates another rule or regulation. Compliance with the regulation becomes the determinant of action, order is maintained by compliance, and the employee is made non-responsible for outcomes thus being rendered irrelevant.

As an example, both a manager's and a worker's jobs are

defined by the job description, work rules, and administrative policy. Organizations develop a set of policies, procedures, and rules to guide decisions. Managers refer to the rules in making decisions, employees follow the rules, and thus the role of the individual is determined by a system of rules. When a situation arises that calls for worker discretion, the organization will create another rule for the worker to follow in the future. Thus action is eventually rationalized completely through compliance with a hierarchical system of "authority based rules" which are applied consistently and uniformly.

Analogues in TQM

Systems: Deming's focus is on the system and its processes and not on rules and rule-bound roles.

> A system is an interconnected complex of functionally related components that work together to try to accomplish the aim of the system. (Deming 1992, 35)

In this system, attention is on the customer, or down-stream user, and the supplier, or up-stream user. So emphasis is on both inputs and outputs and all possible connections. William Scherkenbach uses the terms "voice of the customer" and "voice of the process" to express the understanding of both the system and variation. By statistically measuring system performance, what is actually happening, or what the

process is doing, can be revealed. It is this "voice" that will then be the basis for action. It is only this "voice" that will lead to improvement and not any rule-based role action.

Deming sees the flow chart as the organizational chart of a system:

> This diagram, as an organization chart, is far more meaningful than the usual pyramid. The pyramid only shows responsibilities for reporting, who reports to whom; also control of the work-force. Information flows from the top. A pyramid does not describe the system of production. It does not tell anybody how his work fits into the work of other people in the system. If a pyramid conveys any message at all, it is that anybody should first and foremost try to satisfy his boss (get a good rating). A pyramid, as an organization chart, thus destroys the system, if ever one was intended....
>
> The pyramid contributes to fragmentation of the organization. In fragmentation, each component becomes an individual profit centre, destroying the system, ...(Deming 1992, 39)

Failure to listen to the "voices" of the system, or to divide the components of the system into individual, competing units will destroy the system. As part of what Deming calls Profound Knowledge, it is the knowledge of systems and from systems that will lead to appropriate action and improvement. Thus, the incompatibility of the rationally structured, rule-bound role with Deming's philosophy is apparent.

To demonstrate the influence of a system, Deming uses the Red Bead Exercise. In this exercise, individual

employees are given tools, materials, rules, goals, and training. Their individual performance is recorded, and they are rewarded, punished, or retrained as indicated by their individual performance. This exercise not only demonstrates natural variation, but illustrates the influence of the system. It is the system, rather than rules and incentives, that will determine performance. Thus, the notion of "rationally mastering" rules is inherently false.

Opposition to MBO: The masculine principle's bias for control and hierarchical structure are inconsistent with TQM's demand for the elimination of practices such as MBO, work standards, and incentive pay system. These practices ignore the impact of systems and processes and focus on individuals, control, and hierarchical structures. The techniques of MBO, etc. reflect the masculine belief that organizations can be managed by a set of abstract rules and goals that are objectively measured and implemented throughout various parts of the organization. The reliance on numbers that represent the real, or factual, state of the organization is a patently masculine characteristic.

Deming's philosophy recognizes that workers, etc. are part of a system in which various internal and external components determine system performance. In addition,

various techniques such as MBO that invariably result in numerical measurements of individual performance are counter-productive for the organization's long-term survival.

Deming states that in order for western organizations to make the transformation:

> ...Western style of management requires that managers be leaders. Focus on outcome (management by numbers, MBO, work standards, meet specifications, zero defects, appraisal of performance) must be abolished, leadership put in place. (Deming 1986, 54)

Techniques such as MBO focus attention on outcomes rather than processes, divisions or separate units of the organization, numerical measures, and short-term results.

> In M.B.O., as practiced, the company's objective is parceled out to the various components or divisions. The usual assumption in practice is that if every component or division accomplishes its share, the whole company will accomplish the objective.
>
> Unfortunately, efforts of the various components do not add up. There is interdependence. Thus, the purchasing people may accomplish a saving of 10 per cent over last year, and in doing so raise the costs of manufacture and impair quality. They may take advantage of high-volume discount and thus build up inventory, which will hamper flexibility and responsiveness to meet unforeseen changes in the business.(Deming 1992, 21)

As Deming explains, MBO not only results in the separation of individual work units, it also tends to focus attention and efforts on numerical goals.

> A numerical goal accomplishes nothing. Only

> the method is important. Not the goal. By what method?
>
> A numerical goal leads to distortion and faking. Anybody will meet the quota (goal) allotted to him. He is not responsible for the losses so generated. (Deming 1992, 21)

Rather than attention to the process and improvement of the process, techniques such as MBO and work standards ignore the process and system and result in supervision by numbers.

> Work standards, rates, incentive pay, and piece work are manifestations of inability to understand and provide appropriate supervision. The loss must be appalling. Bonus for extra achievement backfires and burns out. (Deming 1986, 72)

Tendency to View Environment in Adversarial Terms and Seek Control

The masculine propensity to view the environment as hostile and necessitating dominance or control is demonstrated in the masculine stance on science and nature. As Bacon articulated, nature is to be subdued and thus controlled.

> I am come in very truth leading to you Nature with all her children to bind her to your service and make her your slave. (Keller 1985, 36)

In the organizational setting, this perspective extends to customers and suppliers (internal and external), workers, and competitors. When viewed from this perspective, an adversarial relationship is created in which there are both

a desire to dominate and control the adversary, and a fear of being dominated. If the adversary can not be completely dominated, then one must strive to control to the extent possible.

The response to both the desire and fear is to establish an adversarial relationship between all components. The masculine bias for control and competition reflects the belief that competition is beneficial because it ensures the "survival of the fittest." In the customer/supplier relationship, competition is manifested in the "price war" of "least cost" bidding. The organization can gain control of the supplier and the situation by establishing an adversarial relationship between suppliers. If the supplier wants to sell to the organization, they will have to beat the competition. This, theoretically, will lead to the survival of the fittest and the domination of the fittest. An example, most Western organizations are reluctant to share trade information with their suppliers for fear that the supplier could leak information to competitors or could create an situation of control by the supplier. This perception of dominance and control is an anathema to Deming's philosophy, which requires cooperative relationship to supplant the need for control over other components of the system.

Analogues in TQM

The masculine principles of competition and control imply that the customer or buyer gains a competitive edge through bargaining for the least-cost, and thus gains control, over both the supplier and the other producers of similar products. What is actually unleashed is a scenario of confusion, delay, and poor quality. As suppliers are unable to meet the needs of the customer, other sources must be identified and developed. Meanwhile, production schedules must be adjusted, design changes may be necessary, and the much sought after "control" does not exist.

Rather than a competitive relationship, Deming's philosophy envisions a long-term, cooperative approach to both customers and suppliers.

Relationship to Supplier: Deming's fourth principle, "End the practice of awarding business on the basis of price tag alone," necessitates a different relationship between customer and supplier.

> We can no longer leave quality, service and price to the forces of competition for price alone--not in today's requirements for uniformity and reliability.
> . . . .
> The aim in purchase of tools and other equipment should be to minimize the net cost per hour (or year) of life. . . .
> A buyer's job has been, until today, to be on the alert for lower prices, to find a new vendor that will offer a lower price. The other vendors

> of the same material must meet it.
> . . . .
> The policy of forever trying to drive down the price of anything purchased, with no regard to quality and service, can drive good vendors and good service out of business.
> He that has a rule to give his business to the lowest bidder deserves to get rooked. (Deming 1986, 31-32)

The impacts of this competitive stance include the destruction of good suppliers, poor quality, higher long-term costs, loss of business, etc.

TQM's approach to suppliers is to limit the number of suppliers and to establish a cooperative, long-term relationship with these suppliers which includes sharing of information for product design, etc. The "arms around" relationship between customers and suppliers shifts the notion of "control by the customer" to one of mutual support with a limited number of suppliers.

> ...This tends to concentrate production in relatively few, long-term suppliers, and builds a type of captive relationship in which the favored suppliers become so-called "business associates."
> This close-knit, dependent relationship between customer and supplier presumably provides the supplier with ample rewards for achievement....
> Production contracts are usually long-term (as long as six years), and may include requirements for product design and testing. They invariable contain demanding expectations. The expectations include: (1) exceptional quality requirements; (2) reliable just-in-time delivery; (3) exact quantities--no over- or under-runs; and (4) continuously improving productivity resulting in long-term cost reductions. (Deming 1986, 48)

Relationship to Customer: TQM's definition of customer includes both the internal and external user of a product or service and asserts that only the customer can determine quality.

> Quality can be defined only in terms of the agent. (Deming 1986, 168)

The orientation to the customer is one of mutual benefit, in which the customer's needs generate the design of the product, properly designed products satisfy needs, and the producer benefits by profitably remaining in business in the long-run. The customers, the most important part of the production line, must have their needs met. Consumer research provides understanding of consumer needs which in turn enables appropriate product design.

> The purpose of studies in consumer preference is to adjust the product to the public, rather than, as in advertising, to adjust the public to the product. (Deming 1986, 168 as in Irwin Bross, DESIGN FOR DECISION, Macmillan, 1953)

This is in direct opposition the adversarial, exploitive masculine perspective of traditional management leadership. There are numerous accounts of poor product design that not only did not meet consumer needs but actually proved to be dangerous, and in the long-run damaged the organization. An example of this is A. H. Robbin's design and distribution of the Dalcon Shield.

During the 60s and 70s, as life styles changed, female

contraception created a profitable market for pharmaceutical companies. A variety of products were developed to meet the consumers' needs for dependability, convenience, and safety. A. H. Robbins developed the intrauterine device known as the Dalcon Shield--which supposedly would eliminate the problem of inconsistent use that plagues some other forms of contraception. Early research information indicated severe physical problems associated with the contraceptive's use. Rather than either change the design or discontinue the project, management decided to produce the product and exploit an uninformed market. The eventual outcome for A. H. Robbins was bankruptcy and irreparable damage to its reputation. For the female customers, the outcomes ranged from death to sterility or other physical damage.

Avoidance or De-emphasis of Feelings

The hyper rationalism of the masculine perspective places such extreme value on facts, rather than feelings, that it frequently appears to have a phobia about feelings and relationship. In understanding a situation, making a decision, solving a problem, it is not only that the facts are necessary, it is important that any traces of feelings be excluded or ignored lest they muddy the situation. Camilla Stivers' survey of research on objectivity and neutrality suggests that the avoidance of feelings has been

a significant factor in organizations.

> Certainly, both men and women of the time saw feminine feelings as a threat to the impartiality of professional judgment, which was (and is) typically thought to depend on the exercise of dispassionate reason....The impartial reasoner aims to banish uncertainty by eliminating the specifics of situations; through detachment, which facilitates seeing all possible perspectives, the reasoner need not consult with real people. In addition, being impartial means being ruled by reason--in the sense not of simply having reasons but of reducing 'objects of thought to a common measure, to universal laws' (from Young, 1987, 61). Such reason entails being unaffected by feelings; 'only by expelling desire, affectivity and the body from reason can impartiality achieve its unity' (62). In contrast, decisions based on sympathetic understanding, on caring, are defined as sentimental. (Stivers 1993, 42-43)

Analogues in TQM

Deming suggests that managers must rely on both quantitative data and judgement:

> Specifically, a leader must learn by calculation wherever meaningful figures are at hand, or by judgment otherwise,...(Deming 1986, 248)

Deming refers to a myriad of feeling based aspects of organizational processes: intrinsic motivation; pride in work; joy in learning; unknowables; knowing the worker. All of these reflect an awareness of, appreciation of, and acceptance of feelings. To ignore these would be to ignore a component of his system and its underlying philosophy.

Pride of Workmanship: Deming's twelfth principle is

"remove barriers that rob people of pride of workmanship." (Deming 1986, 77)

> These barriers must be removed from two groups of people. One group is management or people on salary. The barrier is the annual rating of performance, or merit rating....The other group is hourly workers, ...
>
> The production worker in America is under handicaps that are taking a terrific toll in quality, productivity, and competitive position. Barriers and handicaps rob the hourly worker of his birthright, the right to be proud of his work, the right to do a good job. These barriers exist in almost every plant, factory, company, department store, government office in the United States today.
>
> How can anyone on the factory floor take pride in his work when he is not sure what is acceptable workmanship, and what is not, and can not find out? Right yesterday; wrong today. What is my job? (Deming 1986, 85)

Deming describes a variety of factors and conditions that rob the worker of "pride in workmanship." These include, but are not limited to confusing instructions, problems with inspection, pressure to meet quotas rather than quality, time spent correcting or hiding defective workmanship or materials from other operations, defective or poorly maintained machinery, and cheap tools.

> We (sic) had for years a contract for one-and-a-half million linear feet of our product. Our management decided to cut costs, improve profits. They gave us poorer and poorer materials to work with. We lost that business. That loss made a deep cut in our profit margin. We can't produce quality with inferior materials.
>
> Production workers told me about the machine that they were trying to use, bought new two years ago, still a disappointment. Other hourly workers showed me machines badly maintained. The

> maintenance man had for years cannibalized discarded machines instead of using new parts. Penny wise, pound foolish.(Deming 1986, 79-80)

Deming cites a situation in which managers performed hourly workers' jobs during a strike. As a result, one manager discovered the deplorable conditions of the machinery and the effect it was having on production. Machinery was serviced and productivity increased. Being questioned as to whose fault this situation was, the manager took responsibility and took corrective action.

> It won't happen again. From now on, there will be a system by which employees may report trouble with machines or with materials and by which these reports will receive attention. (Deming 1986, 85)

As a result of systems that include the worker and provide "pride in workmanship", quality will improve and problems such as turnover will diminish.

> He that feels important to a job will make every effort to be on the job. He will feel important to the job if he can take pride in his work and may have a part in improvement of the system. Absenteeism and mobility of the work force are largely the result of poor supervision and poor management. (Deming 1986, 83)

Attempts of remedying people problems through techniques such as quality circles and employee involvement programs have seldom been successful in the U.S. According to Deming, the lack of success is attributable to management's failure to understand the importance of workers' "pride in workmanship." When workers' ideas and

suggestions for improvement are ignored, the worker may lose their intrinsic motivation for doing a good job. This pride may be more important to the worker than a variety of benefits such as gyms. (Deming 1986, 85)

Thus, the importance of the feeling of pride is a component of Deming's philosophy and a foundation stone for improving quality. The manager who is insensitive or dismissive of worker feelings may be perplexed or frustrated by the failure of techniques promoted as "people oriented." Deming refers to them as "cruel hoaxes" because they promise much, but are ineffective.

Joy of Learning: Deming observes that:

> Anyone is born with a natural inclination to learn. Learning is a source of innovation. One inherits a right to enjoy his work. Good management helps us to nurture and preserve these positive innate attributes of people. (Deming 1992, 73)

His passionate plea for the "joy of learning" is related to the function of psychology as a component of profound knowledge.

> Psychology helps us to understand people, interaction between people and circumstances, interaction between customer and supplier, interaction between teacher and pupil, interaction between a manager and his people and any system of management. (Deming 1992, 73)

In order for a manager to understand people, he or she must understand that people are different, that they learn

differently and at different speeds, and that they have different abilities.

> The most important act that a manager can perform is to understand what it is that is important to an individual. Everyone is different from everyone else. All people are motivated to a different degree extrinsically and intrinsically. This is why it is so vital that managers spend time to listen to an employee to understand whether he is looking for recognition by the company, or by his peers, time at work to publish, flexible working hours, time to take a university course. In this way, a manager can provide positive outcomes for his people, and may even move some people toward replacement of extrinsic motivation with intrinsic motivation. (Deming 1992, 76)

Both intrinsic and extrinsic motivators will influence behavior, but it is the role of extrinsic motivators that is most problematic. While some extrinsic motivators may be beneficial, over-emphasis or reliance on extrinsic factors are destructive.

> Some extrinsic motivation helps to build self-esteem. One may be motivated to show up on time, to come in a clean shirt. But total submission to extrinsic motivation leads to destruction of the individual,... Joy in learning is submerged in order to capture top grades. On the job, under the present system, joy in work, and innovation, become secondary to a good rating. Extrinsic motivation in the extreme crushes intrinsic motivation....
>
> No one, child or grown-up, can enjoy learning if he must constantly be concerned about grading and gold stars for his performance. Our educational system would be improved immeasurably by abolishment of grading. No one can enjoy his work if he will be ranked with others. (Deming 1992, 73-74)

Accordingly, the role and balance of intrinsic and extrinsic

motivators must be understood and this knowledge put into practice. As the individual is encouraged and supported, their self-esteem and confidence grow. Their work becomes meaningful and they will naturally strive to improve. Management must understand and apply this with their employees.

This intrinsic motivation reflects the "joy of learning" and the "joy" that may be experienced by the worker on many levels. Thus, rather than disregarding or ignoring the emotional, or feeling, side of the individual, Deming's philosophy demands that management accept, respect, and develop this attribute.

Deming's emphasis on intrinsic reward and what he refers to as the "joy of working" reflect a decidedly different paradigamatic stance from conventional management's reliance on extrinsic reward. The transformation of Western management requires such a different stance toward workers and motivation.

> The transformation will take us into a new system of reward. We must restore the individual, and do so in the complexities of interaction with the rest of the world. The transformation will release the power of human resource contained in intrinsic motivation. In place of competition for high rating, high grades, to be No. 1, there will be cooperation on problems of common interest between people, divisions, companies, governments, countries. The result will in time be greater innovation, applied science, technology, expansion of marker, 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. (Deming 1992, 82-84)

Unknowables: The masculine principle devalues "feelings" in its preference for facts. Not only does Deming place great value on the feelings of employees and customers, he states that the losses associated with negative feelings about work, the organization, or the product are immeasurable. These costs, "unknowable," are incalculable and stand in direct opposition to the masculine preference for and dependence on the objective stance of the masculine's "concrete" facts and measures that, in principle, can "know everything." Hence, the notion of being unknowable flies in the face of the epistemological stance of masculinity. Visible figures can reflect only a limited portion of operations. Lloyd S. Nelson states that "unknown" or "unknowable" figures are the most important for management. Examples of the figures are:

> 1. The multiplying effect on sales that comes from a happy customer, and the opposite effect from an unhappy customer.
>
> 2. The boost in quality and productivity all along the line that comes from success in improvement of quality at any station upstream.
>
> 7. Loss from the annual rating on performance
>
> 8. Loss from inhibitors to pride of workmanship of employees. (Deming 1986, 121-122)

Deming states that the manager must have knowledge of both the work and the worker. Knowledge of the worker is not limited to awareness of worker performance, but includes awareness of non-job factors that might influence behavior.

> Anybody whose point falls outside the calculated limits of differences to be ascribed to the system is outside the system. Good leadership requires investigation into possible causes....Likewise, someone who is worried about his health, or about someone in the family, may show poor performance. (Deming 1986, 115)

Deming prescribes listening to employees.

> He will hold an informal unhurried conversation with every one of his people at least once a year, not for judgment, merely to listen. The purpose would be development of understanding of his people, their aims, hopes, and fears... (Deming 1992, 88)

As can be seen, feelings are not denied, they are acknowledged and included in the operation of the system. To ignore feelings, as to ignore any other component of the system, limits both knowledge of the system and consequently the potential for improvement. Thus, we see a management philosophy that stands in opposition to the masculine and its preferences for facts, devaluation of feelings, hierarchy, control through reward and punishment, and objectification of individuals. Through its insistence on the importance of "unknowables," systems, and "arm around" relationships, Deming's philosophy requires a paradigmatic stance incompatible with the masculine principle. The

alternative world view called for is the feminine principle.

Competitive Nature that Yields a One-up-One-Down Position

The masculine preference for competition results in relationships that are hierarchically structured, thus yielding a one-up-one-down relationship of the interacting parties. Not only does a superior-subordinate relationship result, but interactions become win-lose transactions. The winner, assuming the superior position, may either dominate or eradicate the loser. According to this model, the survival of the fittest produces a stronger species (company, employee, country).

An example of this preference for competition is the male fascination with sports. Although many sports are team sports, the dynamics are that of confrontation and victory in a win-lose outcome. This competitiveness has been articulated by: "It's not how you play the game, it's winning that counts." This ideology translates to organizations in the competition for promotions, pay raises, performance appraisals, hostile takeovers, etc.

The results of this reliance on competition may not be as beneficial as believed.

> We live in a society dedicated to dividends, organization, decision, orders from top to bottom, confrontation (every idea put forth must win or lose), and all-out war to destroy a competitor be he at home or abroad. Take no prisoners. There

> must be winners, and there must be losers. This may not be the road to better material living. (Deming 1986, 149)

Analogues in TQM

Deming's response to competition reflects a concern for its negative consequences and a desire for a transformation to cooperative relationships.

> The transformation will take us into a new system of reward. We must restore the individual, and do so in the complexities of interaction with the rest of the world. The transformation will release the power of human resource contained in intrinsic motivation. In place of competition for high rating, high grades, to be No. 1, there will be cooperation of problems of common interest between people, divisions, companies, governments, countries. 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. (Deming 1992, 88)

In this transformation, the manager must "understand the benefits of cooperation and the losses from competition between people and between groups." (Deming 1992, 88)

Nowhere can this be seen more clearly than in Deming's understanding of and stance on performance appraisals.

Performance Appraisals and Ranking: TQM principles include abolishing ranking, merit systems, annual performance appraisal, and incentive systems. These

techniques, bedrock for conventional management, attribute success to fostering competition.

Competition actually demoralizes people. Under a merit system, the aim of the individual is to please the boss and rating people does not help them to a better job and may actually work against the aim of the organization. For example:

> ...The top sales man may be a heavy loss to the company by overselling--selling to a customer a bigger copying machine than he (the customer) needs; selling a bigger or fancier insurance policy than the customer can handle; promising immediate delivery; promising unauthorized discounts. Just as bad, the top salesman may have sold to a customer a smaller copying machine than the customer needs, under the excuse that the customer claims he can not afford to pay for the one that he needs. The salesman, ranked on sales, would rather sell a machine that is too small than to sell none at all. (Deming 1992, 19)

Peter R. Scholtes (1987) described conventional performance evaluation as a lottery that is distorted by most of its components and contributes to demoralized workers.

> When all is said and done, the conventional performance evaluation system is more like a lottery than an objective observation process. It is distorted by evaluator bias and more often reflects the unpredictability and instability of the organization's systems. And those who promote these activities labor under the mistaken belief that they are achieving a true discernment of an employee's achievement. Mean while, low-rated employees, sharing in its mistaken belief, feel disheartened and bear undeserved personal guilt. Those rated high, also sharing the same belief,

> take undeserved personal credit. Many employees are skeptical of the evaluation results and even more skeptical of the competence of those managers who indulge in such futilities. (Scholtes 1987, 18)
>
> Performance evaluation is an exercise in futility. It is an activity that lulls us into a belief that we understand something, when all we have accomplished is to create an oversimplified illusion about something that is very complex. When we act as though our evaluations are accurate, when we reward, punish, promote, commend or retain people based on our evaluations, we are making adjustments to a system about which we know very little. Adjusting the unknown is called "tampering." We would never consider indulging in this kind of blind tampering with our prized possession, our bodies or even our electronic gadgets....Yet, without any hesitation, we tamper with the performance of our workforce.
>
> The evaluation of employee performance is usually conducted with good intentions. Managers are motivated by a desire to improve the business and the performance of employees in the organization. Such ideals should not go to waste. It is the challenge of the new quality era to find more effective ways to improve business and employee performance. (Scholtes 1987, 26)

Performance appraisals reflect the masculine bias for order and control. A question often asked, when the elimination of performance appraisals is proposed, is "How will management be sure the worker will do what they are supposed to do?" In other words, how will management control and manipulate worker behavior?

In addition to control, TQM's position on performance appraisals is in opposition to the masculine emphasis on the individual. The masculine perspective on the individual is

that human beings have the ability to control their efforts and outcomes, and who functions in a hierarchically structured environment.

> (Personal effort) may be the heart of performance evaluation. Of all the factors, this is the factor over which employees seem to have the most control. It is their main contribution to their performance and the means by which they can most influence their evaluations. Conventional management practice is based on the belief that personal effort is also widely distributed among individuals.
>
> But individual effort is often given or withheld, even unconsciously, in response to organizational conditions that foster or discourage it. In a poorly managed company, there is little motivation for employees to extend themselves. The opposite is true, however, in well-managed companies, those managed with a focus on ever-improved quality, a concern for pleasing the customers and a commitment to treating employees with caring and respect. (Scholtes 1987, 12)

TQM's focus is on the system as interdependent parts and processes. According to Deming:

> Ranking is a farce. Apparent performance is actually attributable mostly to the system, not to the individual. The Red Beads will clarify this for all time. (Deming 1992, 17)

This system relationship pays attention to the process and not the individual, because it is the interrelationship of the components of the system that will determine the outcome.

> ...workers operate within an environment, a system, and evaluations must take these factors into account. Employees use the materials, machines or methods provided for the work. Usually they depend on the products of the work of

> others: instructions, information, unfinished goods, components, etc. The quality of an employee's performance, therefore depends on how good, how reliable and how consistent these necessities are. (Scholtes 1987, 15)

It is the "system" that requires the attention of management. When the system is stable or "in control," the variation within the control limits is not only normal, but system based. Thus, to reward or punish someone operating within the system makes no sense.

Aspects of TQM Consistent With The Feminine Principle

The feminine principle has previously been characterized by its preference for and reliance on a world view that tends to:

- Be grounded in relationship as its paradigmatic or axiological stance for encountering reality

Corollary to this axiological stance the feminine principle tends to:

- View the person as emergent from relationship, i.e. that is the evolution of the interaction between people is the basis of context
- Prefer the epistemological stance of experience as knowledge
- Accept the interactive and iterative nature of experience, i.e. the theory of action is based on "act and see what happens"
- See the environment as unbounded, that is, because everything is related and interactive the notion of boundaries does not make sense.

The above identified characteristics of the feminine principle are compatible and consistent with Deming's philosophy of continuous improvement. In this section, the consistencies will be identified and discussed.

Grounding in Relationship

Relationship refers to a paradigmatic stance in which the connectedness of individuals to each other and to the world in general is fundamental. In contrast to the separated-self of the masculine principle, the feminine principle reflects a notion of connection that renders experience and action as interactive, iterative, and processual. The individual exists in an interconnect that defies the instrumentalism of the masculine. Just as the "separate self" is the result of the dynamics of individual development, the sense of connection is the result of the individual development process for females.

> Through their early relationship with their mother, women develop a sense of self continuous with others and a richly constructed inner self-object world that continuously engages unconscious and conscious activity: "The basic feminine sense of self is connected to the world." This psychic structure and self-other process in turn help to reproduce mothering: "Because women themselves are mothered by women, they grow up with the relational capacities and needs, and psychological definition of self-in-relationship, which commits them to mothering." (Chodorow 1978, 119)

The paradigmatic stance of the feminine principle is that of relationship which is grounded in the perceived "wholeness" and connection of everything in nature.

> ...the urge to relate, to join, to be in-the-midst-of, to reach out to, to value, to get in touch with, to get involved with concrete feelings, things, and people, rather than to abstract or theorize. (Ulanov 1971, 155)

The "wholeness" of the feminine is reflected in the connections of everything, life cycles, seasonal cycles, etc. The archetype of Mother Earth and the Great Mother represent the feminine principle in its static position.

> The static aspect of the feminine principle takes its elemental image from the containing uterus--moist, dark, surrounding, holding fast to what is gestating within it. Its essence is the impersonal, rhythmic cycle of nature, which gives all life and takes all life. It is <u>being</u>: organic, undifferentiated, all components interdependent, and no one component more important than any other...Perpetuation of the species and survival at the collective level are central values...,and the individual is valued only as an expression of the whole, a piece of the aggregate.....The static feminine is most simply symbolized by a circle, representing an undifferentiated whole, or in the image of the uroboros, representing the great, self-regenerating round of nature. (Hill 1992, 4-7)

A contemporary example of the paradigm of relatedness is attention to the global community and the global environment. In the late twentieth century, the connections of the eco-system have become abundantly apparent. Relatedness and wholeness can be observed at several levels of the eco-system. At one level, the actions of people living in one geographical area impact directly and indirectly on those of other areas. For example, as water is drained off of the Colorado River to provide water for residents and farmers of southern California, the water table for the Colorado basin apparently is dropping and the inhabitants are being affected. Another example

demonstrates the relatedness of a geographical eco-system. As the Florida Everglades have been drained to provide land for residential and commercial development, the chemical balance of the water becomes more alkaline as the ocean water encroaches. In addition, there is increased chemical run-off from the developed land. As the chemical balance of the water changes, the plant and animal life dependent on the water are dramatically affected. There is a loss of habitat and a corresponding loss of life and ecological balance. In return, the consequences for humans are just now being understood. As plants and animals die, the natural filtration system of the Everglades is being destroyed, thus affecting quality of the water system. The very commercial and residential development that initiated the action (draining) is now being destroyed by the degradation of the eco-system. Thus the connection between all of the components of the eco-system must be considered, and if ignored, typically results in detrimental consequences for the whole. The same thing can be observed in various organizations as individual departments have operated in isolation without knowledge of, or concern for, the organization as a whole or for society.

This knowledge of the "whole" has been described in a paper by Mary R. Schmidt, "Alternative Kinds of Knowledge and Why They Are Ignored." Schmidt uses the building and

collapse of an earthen dam on the Teton River in Idaho in 1979 to describe different types of knowledge, or ways of knowing, and how the modern preference for rational knowledge led to disaster. The dam project operated in a rational framework at both the scientific and bureaucratic levels.

> Science has claimed that reliable knowledge is only obtained by the scientific method, which involves deduction, pulling down hypotheses from theories and testing them in experiments under controlled conditions. These experiments generally utilize analysis, removing objects from contexts and dividing them into independent parts, which are manipulated in order to confirm hypotheses and strengthen theories. Here the assumption is that the <u>whole</u> (emphasis added) is nothing more than the sum of the parts, and that partial knowledge will add up to reliable knowledge of the whole. Thus the everyday world of our senses is transformed into objects to be analyzed, abstractly described, and made predictable. . . .
>
> Bureaucratic organizations incorporate their own kinds of knowledge and have their own ways of handling and distributing it. Ideally, top leaders make rational decisions based on complete information from analyses of problems, in order to chose the best means to achieve clear ends, again as causes determine effect. . . . These broad statements are then sent down through stratified layers to lesser officials in specialized offices, who subdivide them and spell them out with written rules and regulations and transform them into standard operating procedures, the "how to" knowledge of the bureaucracy. Specialized workers at the lowest level can then be trained and held accountable to perform these tasks by rote.

As applied to the Teton River dam incident, the rational, scientific and bureaucratic knowledge ignored the

knowledge of workers that represents a "feel" for the situation as a reflection of years of experience. In this situation, grouters, who fill underground holes with various forms of sludge, develop an expertise for reading the holes to determine what type and how much sludge is needed. This reading of the whole is described as "a feel" and being "alert to the 'back talk' of the specific situation." Specifically the work of the grouter is described as "Grouting is more like an art, he said, requiring a certain 'feel' for the work." (Schmidt)

The bureaucratic structures, with the separation of workers and work, lead to another characteristic which may be referred to as "knowledge of the whole." Without this knowledge of the whole, important information was not available and bureaucratic decisions were made to stop filling fissures in order to meet a deadline. The results of this decision was a weak dam that later collapsed destroying people, land, and animals. Schmidt suggests that the reason that the knowledge of the hole and the whole was ignored has to do with our bias towards rational knowledge.

> But the explanation may be more complex and interesting. For it is engineering that scorns the knowledge of uneducated laborers, bureaucracy that disaggregates knowledge, and science that dismisses knowledge embedded in feelings. Thus the reasons seem to lie in the institutional context, and also in a view of reality embedded in all three. (Schmidt)

Schmidt posits that a stance towards knowledge is needed that will shift us from

> the focus from an hierarchical model of a relatively simple static system to more interactive models of complex dynamic systems, and represents a richer multifaceted reality. Picturing nature as generative and resourceful (analogous to a prolific earth mother, an analogy that neither McClintock nor Keller make) allows nature to be seen as an active partner in a more reciprocal relationship with an equally active observer. But the observer must assume an attitude of humility and an open attentiveness that allows one to "listen to the material" in an inquiry based on respect rather than domination.

This does not mean a rejection of rational knowledge, but an inclusion of other ways of knowing that will enrich and enhance our understanding of, and response to, a very complex reality.

Kosaku Yoshida contrasts the concepts of "whole-istic" and analytic thinking. In a whole-istic approach, the system or process must be understood in its totality, given that the sum is not equal, but is greater than the parts. In contrast to this, the analytic approach is based on breaking down the whole into the various, separate parts. In this mind set, it is the individual or the part that receives attention and, as a result, we look for the individual who is the problem in order to replace her or him. The whole-istic approach requires that the process, viewed in its entirety, be the focus with the understanding that each part is integral to the whole and that it is not

reasonable to get rid of any one part. To do so will necessarily impact the whole. The correlations of the whole-istic and analytic approaches to management practices are obvious. The relationship to customers, suppliers, and employees are just a few of the manifestations. (Kosaku Yoshida, "Whole-istically, a Talk by Dr. Kosaku Yoshida)

The feminine preference for relationship is explained by the dynamics of the psychological development of the self, just as was the masculine preference for objectification. In this developmental process, as the individual develops a separate identity from the mother, the female experience is one of likeness, or sameness with the mother.

> For the little girl, it is easy to see what is at stake. She remains identified with her mother; the source of all her most potent emotions, positive and negative, pleasurable and painful. As a result, she perceives herself as the same sort of being as her mother, through and through. If, as she probably does, she learns to perceive both her mother and herself as an amalgam of the pleasure-provoking and the pain-provoking, the 'good' and the 'bad', her sense of herself is to that extent internally fissured. Nevertheless, she remains all of a piece with the creature, her mother, on whom her sense of reality depends. When the little girl moves on to establish for herself an appropriate 'object' on whom to focus her desires, she again has her mother available to her as model. She can follow the line of her mother's gaze towards her father and towards other males. The object of her desire is thus a creature inherently unfamiliar to her, even alien, but one whom she addresses from a psychologically coherent foundation. (Hudson & Jacot 1991, 39-40)

Thus, although the individual development involves a separation from the mother, for the female child this experience occurs in a context of sameness and relationship. The experience is not one of difference, as experienced by males, but is one of sameness. This sameness establishes a sense of connectedness that is translated into a paradigmatic stance of relationship. The implications and ramification of this paradigmatic stance is reflected in the various ways the female encounters the world.

Self in Relationship: A circle symbolizes the undifferentiated whole of the feminine principle. In this "whole," the individual is valued only as an expression of the whole. (Hill 1992, 5) Deming's belief that the flow chart (representation of the process) is more representative of the organizational structure than the typical hierarchically, structured organization chart reflects this notion of wholeness and connectedness. The process is the focus of attention and not the individual functioning within the process. To isolate attention to the individual is to ignore the "whole" and to jeopardize an understanding of the process. It is not the worker, department, or division that requires attention, but it is the process which includes suppliers, customers, etc. In this context, it is the survival of the species that requires our attention.

The self in relationship may be represented by the archetypal image of the "good mother" who is the source of life, nurturer of life, and promoter of growth and development. In organizations, the "good mother" may be reflected in the organization's focus on the development of its employees. This development is seen as mutually beneficial since, as the employee expands her or his skills and abilities, the organization is able to be more effective and thus sustain and perpetuate itself. In turn, the more effective the organization is the greater its ability to allocate resources for employee development. In addition to this reciprocity, the joy of learning and working are experienced by the worker. It is through this mutual relationship that the life of the organization is sustained and that the society in general is benefitted. The metaphors of "bringing an organization or product to life" and "birth of a new product" reflect the feminine perspective.

Conscious/Unconscious: The structure of the conscious and unconscious are representative of the feminine principle of wholeness and relatedness. As discussed previously, both the masculine and the feminine polarities in relationship are necessary for wholeness and development. As noted earlier, when the feminine is repressed and pushed into the unconscious, it will be released in the form of the negative

feminine. Likewise, when the feminine is recognized, valued, and expressed at a conscious level, the energy flow between the poles of the psychic structure will generate growth and development. The conscious and unconscious do not exist in isolation, but exist in relationship to each other and provide the basis or environment for human development. It is the two in relationship that enables the development. Any separation, or attempted separation, or preference for one over the other creates stagnation and damage.

As an example, the feminine way of knowing acknowledges intuition (unconscious) as a viable component of an epistemological stance. Another aspect of the feminine inclusion of the unconscious is the acceptance of the validity of feelings. As observed by Carol Gilligan (1982), the moral decision making of women evolves out of a sense of responsibility and caring rather than rules. In contrast to the conventional management reliance and insistence on decision making based on objective facts, the feminine values the emotional state or feelings of those making and affected by decisions. As discussed in the previous section, Deming stresses the feelings that workers have toward their jobs, organizations, and management.

Analogues in TQM

Break down barriers: Deming's management philosophy has many consistencies with the feminine principle of wholeness and relatedness. One of his principles is "break down barriers" between workers, departments, divisions, customers, suppliers.

> Break down barriers between departments. People in research, design, sales, and production must work as a team, to foresee problems of production and in use that may be encountered with the product or service. (Deming 1986, 24)

> People in research, design, purchase of materials, sales, and receipt of incoming materials must learn about the problems encountered with various materials and specifications in production and assembly. Otherwise, there will be losses in production from necessity for rework caused by attempts to use materials unsuited to the purpose. Everyone in engineering design, purchase of materials, testing materials, and testing performance of a product has a customer, namely, the man (e.g., a plant manager) that must try to make, with the material purchased, the thing that was designed. Why not get acquainted with the customer? Why not spend time in the factory, see the problems, and hear about them? (Deming 1986, 62)

The connection between the various employees, departments, etc. are consistent with Deming's notion of a system. As described previously, a system consists of interacting parts, and its boundaries can be as small or as large as desired. A system may involve a particular operation, or it may extend to include a society. However large or small the system, the essential characteristic is the relatedness and wholeness of the integrated parts.

Drive out Fear: TQM's acknowledgement of and acceptance of the unconscious are reflected in the desire to drive out fear, the reliance on unknowables, and the unmeasurable costs of poor quality or customer dissatisfaction.

Deming states:

> No one can put in his best performance unless he feels secure. *Se* come from the Latin, meaning without, *cure* means fear or care. *Secure* means without fear, not afraid to express ideas, not afraid to ask questions. Fear takes on many faces. A common denominator of fear in any form, anywhere, is loss from impaired performance and padded figures. (Deming 1986, 59)

Workers describe the fears that they experience in everything from the fear that the company may go out of business, to the fear of negative appraisals, to the fear of admitting a mistake. According to Deming, the results of fear and management's failure to acknowledge fear are devastating to the organization.

> ...inability to serve the best interests of the company through necessity to satisfy specified rules, or the necessity to satisfy, at all costs, a quota of production. (Deming 1986, 61)

Unknowables: Just as Deming encourages management to drive out fear, he admonishes management for using only visible figures. Unknowables are critically important to long-term effectiveness, problem solving, and quality improvement. These unknowables include both positives and

negatives. For example, the positive benefits of the "pride in workmanship" and the "joy of learning" are immeasurable. Likewise, the costs of customer dissatisfaction and poor quality are immeasurable. It is just as important, if not more important, to consider these unknowables in the management process as it is to rely on visible figures. Deming identifies "management by use only of visible figures, with little or no consideration of figures that are unknown or unknowable" as a deadly disease. (Deming 1986, 98)

> A company may appear to be doing well, on the basis of visible figures, yet going down the tube for failure of the management to take heed of figures unknown and unknowable. (Deming 1986, 124)

Person as Emergent From Relationship

The feminine principle understands the person in relationship, or emergent out of relationship. The feminine qualities of "affiliativeness, relatedness, empathy, and nurturance" (Chodorow 1978, 120) reflect this stance. It is not the individual, separate from others, that has meaning, but it is the person that emerges out of interaction with and connection with others that has meaning.

In stark contrast to management theorists of her time, Mary P. Follett took a more communitarian stance and emphasized the individual in relationship with the group.

Follett described the notion of person in relationship to others as she explained the law of the situation and the process of integration. The law of the situation, or appropriate action, can not be determined by the individual isolated from others and operating independently. It can only be determined by the interaction of the persons involved in and integrated with the situation. It is this position of relatedness that results in development.

> ...Follett believed that true individualism was only possible through relationship in the group. Effective action required relating to others. As individuals relate in groups, they become grounded in the situation and achieve effective action. (Wolf 1988, 55)

Follett used the example of tennis to express the integrative and evolving nature of processes. It is the reciprocal interaction between the two players that allows the match to continue. The play of each individual is both determined by and determines the play of the opponent.

> Processes, facts, relating, and wholes comprise the key ideas for integration. Organizations like other kinds of social life consist of continual and mutually determining processes. A causes B at the same time that B is causing A. Situations affect and are affected by other situations at the same time. (Wolf 1988, 53)

It is in this integrated position that the "law of the situation" will become apparent and it is in this dynamic environment that the "law of the situation" will continue to evolve. The law of the situation will emerge from the

known, or understood, "facts" for that particular circumstance and will provide the basis for action.

> Through this reflective objectivity (our term, not Follett's), both superiors and subordinates would "take their orders" from the situation. (Harmon & Mayer 1986, 343)

It is clearly understood that, since the situation will continue to emerge, it is necessary for individuals to stay in relationship so that appropriate action may be determined.

> If taking a responsible attitude toward experience involves recognizing the evolving situation, a conscious attitude toward experience means that we note the change which the developing situation makes in ourselves; the situation does not change without changing us. (Fox & Urwick, 1973 2nd, 65)

Analogues in TQM

The consistency of Deming's philosophy and the person in relationship are reflected in his explanations of:

- how we understand a system,
- the importance of managers knowing the work and the worker, and
- the role of the worker,

Systems: As stated previously, a system is comprised of interdependent parts that interact toward a particular aim. It is the members of the system who can properly determine what the system is or how the system operates.

This is characterized by the necessity of the group in establishing the flow chart of the process. Within this system, everyone is both a supplier and a customer. As a supplier, or provider of a good or service, to the next operation in the system, it is necessary for you to talk to the customer to determine exactly what the customer wants/needs and how the customer defines quality. It is through this process that a stable relationship is developed in which information is mutually shared. This is not a competitive relationship of winners and losers, but a cooperative relationship of long-term survival.

Role of Worker: In many organizations, the job of a worker is identified as performing a specific task. This focus isolates the individual worker and the task being performed from the system. Because of this isolation, objectives may be set, decisions made, and actions taken that meet that particular job, but may be detrimental to the total organization. As an example, the purchasing agent that negotiates a least cost contract may provide the production manager with either materials that disrupt production, or the supplier may be financially unsound, go out of business, and interrupt production (no materials). Thus, while the purchasing manager meets a goal of least-cost bidding, the system is hurt.

In Deming's philosophy, the role of the worker is to

work on the system.

> Every activity, every job is a part of a process. A flow diagram of any process will divide the work into stages. The stages as a whole for a process. The stages are not individual entities, each running at maximum profit....
>
> Work comes into any stage, changes state, and moves on into the next stage....Each stage works with the next stage and with the preceding stage toward optimum accommodation, all stages working together toward quality that the ultimate customer will boast about. (Deming 1986, 87)

Know the Work and the Worker: Deming implores the manager to know the work and the worker. Knowledge of the worker is not limited to name, rank, job, but refers to knowing the workers needs and desires. It is only by understanding both the work and the worker that the manager can lead effectively.

> Leaders must know the work that they supervise. They must be empowered and directed to inform upper management concerning conditions that need correction....Management must act on the corrections proposed. In most organizations, this idea is only an idle dream, as the supervisor knows nothing about the job. (Deming 1986, 54)

As previously discussed, managers need to know the worker. This understanding can come about through talking with workers and perhaps counseling workers.

Epistemology--Experience as Knowledge

As described previously, the masculine perspective on

knowledge is that of objectivity based on the separation of the self and object. While this perspective on knowledge has been the primary stance of Western culture, there is considerable research establishing other ways of knowing. The feminine epistemology is based in connection or relatedness of the self and the world around us. This connectedness reveals a way of knowing that is based in experience rather than abstraction, and incorporates non-rational aspects such as intuition and feelings as legitimate components of knowledge and knowing.

In Women's Ways of Knowing: The Development of Self, Voice, and Mind (Belenky et al. 1986), a variety of ways of knowing are described and documented. These ways include received knowledge, subjective knowledge, procedural knowledge, and constructed knowledge. While there seem to be some parallels between personal development, socio-economic status, educational experiences, and preferences for subjective or procedural knowledge, it is important to note the feminine acceptance of "other ways of knowing." The authors identify two primary epistemologies:

> ...we posit two contrasting epistemological orientations: a separate epistemology, based upon impersonal procedures for establishing truth, and a connected epistemology, in which truth emerges through care. (Belenky et al. 1986, 102)

The connectedness referred to:

> not to any sort of relationship between the self

> and another person but with relationships between knowers and the objects (or subjects) of knowing (which may or may not be persons). (Belenky et al. 1986, 102)

While the modes of knowing are not gender-specific, they appear to be gender-related, with more women than men utilizing a connected way of knowing.

The relationship of knowledge to experience and to others is complex and builds on the subjectivist's position.

> Connected knowing builds on the subjectivists' conviction that the most trustworthy knowledge comes from personal experience rather than the pronouncements of authorities. Among extreme subjectivists this conviction can lead to the view that they can know only their own truths, access to another person's knowledge being impossible.
>
> Connected knowers develop procedures for gaining access to other people's knowledge. At the heart of these procedures is the capacity for empathy. Since knowledge comes from experience, the only way they can hope to understand another person's ideas is to try to share the experience that has led the person to form the idea. (Belenky et al. 1986, 113)

This sharing or connection comes about through conversation that seeks to incorporate facts and "ways of thinking" to develop empathy; to understand rather than to judge; and to be collaborative. (Belenky et al. 1986, 114-118)

Analogues in TQM

It is in the role of experience and the connection of the system that this epistemological stance is consistent with Deming's philosophy. Two components of Deming's

philosophy reflect the role of experience and connection. These are the use of operational definitions, and the use of run-charts and control-charts.

In his 1992 book, The New Economics, Deming states the importance of profound knowledge which is comprised of:

- appreciation for a system
- knowledge about variation
- theory of knowledge
- psychology

As Deming stated, the components of profound knowledge can not be separated or isolated, but must be considered as a whole. Profound knowledge enables managers to both understand and predict system operations. It is this knowledge that may lead the way to the transformation of organizations toward continuous improvement. Knowledge according to Deming is:

> ...theory that you apply over time. Knowledge of Physical, Logical, and Emotional experiences requires the anticipation of future experiences or the remembrance of past experiences. Knowledge may be empirical in that it is never completely verified: it is always under the test of the next experience. (Scherkenbach 1991, 195)

Operational Definitions: Operational definitions are:

> ...The only communicable meaning of any word, prescription, instruction, specification, measure, attribute, regulation, law system, edict is the record of what happens on application of a specified operation or test....
>
> An operational definition puts communicable meaning into a concept. Adjectives like good, reliable, uniform, round, tired, safe, unsafe, unemployed have no communicable meaning until they are expressed in operational terms of sampling,

test, and criterion. (Deming 1986, 276-277)

Operational definitions are created between suppliers and customers and provide a means for business transactions.

> An operational definition of safe, round, reliable, or any other quality must be communicable, with the same meaning to vendor as to purchaser, same meaning yesterday and today to the production worker. (Deming 1986, 277)

Scherkenbach explained that operational definitions linked the customer and the supplier by linking the "voice of the customer" and the "voice of the process."

> They are a vital part of the linkage between the Voice of the Customer and the Voice of the Process. When the producer does not realize the intent of the customer, there will probably be a gap. (Scherkenbach 1991, 210)

As an example:

> ...A customer wishes to buy a blanket that is 50% wool. He has a concept of what 50% wool is. A producer translates what he perceives to be the Voice of the Customer into specifications to make a blanket that is 50% wool. It seems simple enough, but there can be a large gap between what the customer meant by 50% wool and what the producer thought he meant by 50% wool.
>
> The customer's concept was that the wool would be dispersed within the blanket in a certain way. The producer translated that to mean that if the top half was all wool and the bottom half was all cotton, the blanket would beet the customer's requirements. The blanket met the internal specifications of the producer, but those specifications had no contact with the world of the customer. (Scherkenbach 1991, 211-212)

The operational definition is not what is intended, but is based in experience.

The operational definition of any aim or intent is

> not what you intended it to be, but what resulted when the process was operated. (Scherkenbach 1991, 168)

Just as operational definitions reflect knowledge based in both experience and in relatedness, the use of and importance of run-charts and control charts is consistent with the feminine notions of knowledge.

Run-charts and Control-charts: Run-charts and control charts provide examples of how knowledge is based in experience. Run-charts, or time-plots, record occurrences over a period of time, thus picture the variations that exist in a system. By themselves, run-charts are not terribly informative, but when further analyzed as control-charts, they reveal the nature of the variation. Control-charts:

> ...indicates the range of variation built into the system. The boundaries of this range are marked by upper and lower statistical control limits, which are calculated according to statistical formulas from data collected on the process. (Scholtes 1988, 2-33)

The analysis of the control-chart will identify variation that is inherent in the system and variation that occurs due to a special cause. This provides knowledge of the system that is based in experience.

> Control limits are not the same as specification limits, nor are they related to budgets, targets, or objectives....Control limits say nothing about how a process is supposed to perform or what managers hope it can achieve. They only indicate what the process is capable of doing. (Scholtes

1988, 2-33)

Not only is the control-chart based in experience, it is relational.

> Control limits, once we have achieved a fair state of statistical control, tell us what the process is, and what it will do tomorrow. The control chart is the process talking to us. (Deming 1986, 333)

Both of these techniques help management understand the system and make appropriate decisions. By determining whether or not the system is in control, by knowing the capabilities of the system, and by knowing when action is required, the manager has knowledge based in experience--"what is" rather than "what ought to be."

Iterative Nature of Experience

Knowledge based in experience and connectedness is related to the iterative nature of knowing through experience. By iterative, I mean that knowledge is tentative and evolving. Since there will always be unknown results of any action, it is important to act, reflect on the results the action, determine appropriate future action, and repeat the process.

> Processes contain individual behaviors that are interlocked among two or more people. The behaviors of one person are contingent on the behaviors of another person(s), and these contingencies are called interacts....patterns in which an action by actor A evokes a specific response in actor B (so far this is an interact),

> which is then responded to by actor A (this complete sequence is a double interact). (Weick, 1969, 89)

The feminine's awareness of relatedness suggests that these connections must be considered as requisite for action. Action based on relatedness, rather than abstract rules and objective analysis, requires a tentative approach that relies on the responses and needs of all parts of a system. Whitmont describes the affirmation and reflective nature of the feminine way of knowing and a "new physics" based in the feminine tradition:

> This kind of learning--far better than abstract explanations or precepts of how it <u>should</u> be--occurs through gradual revelation and experiencing.
>
> It is a significant parallel that in our time also the new physics has discovered that all reality is subjective in so far as it grows out of the encounter between the observer and his interaction with and orientation toward a "you," the reacting object of the observation. What we have formerly considered objective reality we are now discovering to be subjective experience of encounter and relationship....
>
> By empathizing with and nurturing, the feminine ego reveals and affirms the subjective experience of the moment as a new dimension of reality which extends not only in space, but also in the moving dimension of time. (Whitmont 1982, 200)

Analogues in TQM

Deming's continuous improvement philosophy incorporates this iterative nature in its use of the PDSA Cycle (also known as the Deming Wheel) and the Triangle of Interaction.

Each of these is based on understanding: there are unknown consequences of any action; the continuous nature of improvement; and the importance of the relationship between the components of a system.

Triangle of Interaction: A cornerstone of quality management is that the customer defines quality. This rather simplistic statement relies on the ability of system components to communicate with each other concerning quality.

> Neither the building of a product nor tests thereof in the laboratory and on the proving ground are sufficient to describe its quality and how it will perform or be accepted. Quality must be measured by the interaction between three participants,...:(1) the product itself; (2) the user and how he uses the product, how he installs it, how he takes care of it (example: customer permitted dirt to fall into roller bearing), what he was led (as by advertising) to expect; (3) instructions for use, training of customer and training of repairman, service provided for repairs, availability of parts. The top vertex of the triangle does not by itself determine quality. (Deming 1986, 176)

The product. Your own tests of the product in the laboratory and in simulations of use. Test of the product in service.

Training of customer. Instructions for use. Training of repairmen. Service. Replacement of defective parts. Availability of parts. Advertising and warranty: What did you lead the customer to expect?" What did your competitor lead him to expect?

The customer and the way he uses the product. The way he installs it and maintains it. For many products, what the customer will think about your product a year from now, is important.

The Three Corners of Quality
(Deming 1986, 177)

In this system, consumer research provides a means for the producer to determine consumer response, consumer demands, and future changes.

> The main use of consumer research should be to feed consumer reactions back into the design of the product, so that management can anticipate changing demands and requirements and set economical production levels. Consumer research takes the pulse of the consumer's reactions and demands, and seeks explanations for the findings.
>
> Consumer research is a process of communication between the manufacturer and users and potential users of his product,...(Deming 1986, 177)

Through this process, the manufacturer is able to:

> ...discovers how his product performs in service, what people think of his product, why some people will buy it, why others will not, or will not buy it again, and he is able to redesign his product, to make it better as measured by the quality and uniformity....(Deming 1986, 178)

The triangle of interaction, with the inclusion of consumer information as well as laboratory testing, reflects the notion of knowledge as experience. Knowledge of the product does not rest with laboratory testing, but includes the actual use of the product and the responses of the users (and non-users). It is through this complex that the producer can have knowledge of the quality requirements of consumers and how the organization can meet those requirements.

This is a departure from the traditional manufacturing approach of: (1) design it; (2) make it; (3) try to sell it. These three steps were usually performed independently from one another, and provided little means of really improving the product of the process. The quality approach adds the fourth step of consumer research for product improvement.

> In the new way, management introduces, usually with aid of consumer research, a fourth step:
>
> 1. Design the product
> 2. Make it; test it in the production line and in the laboratory
> 3. Put it on the market
> 4. Test it in service; find out what the user thinks of it, and why the nonuser has not bought it. (Deming 1986, 180)

This leads to a helix of continuous improvement that is

never ending.

PDSA: The helix of continuous improvement is the structure of the PDSA Cycle (Deming Wheel or the PDCA Cycle). The PDSA Cycle is a process for implementing changes and continuous improvement. It was adopted from Walter Shewhart and adapted by Deming as a means for directing the change process. The cycle can be operationally defined through 8 action steps.

I. PLAN
Develop a Plan to Improve

Step 1: Identify the opportunity for improvement.
Step 2: Document the present process
Step 3: Create a vision of the improved process
Step 4: Define the scope of the improvement effort.

II. DO
Carry Out the Plan

Step 5: Pilot the proposed changes on a small scale, with customers, and over time.

III. STUDY
Study the Results

Step 6: Observe what you learned about the improvement of the process.

IV. ACT
Adjust the Process, based on your new knowledge

Step 7: Operationalize the new mix of resources
Step 8: Repeat the Steps (Cycle) on the next opportunity. (Scherkenbach, 1991, 63)

This iterative, experienced based process yields knowledge about your system and the results of any changes

that have been made.

> Results are a vital part of the PDSA improvement cycle. They will immediately tell you if your plan or theory does not apply to this world. They also will reinforce your belief that your plan or theory does work to improve the process. (Scherkenbach 1991, 159)

Using this model the focus can be on continuous improvement. The notion of continuous improvement is consistent with the feminine principle's view of the unbounded nature of existence.

Unbounded Environment

The feminine principle's understanding of the relationship of all parts of the whole reveals a view of the environment as unbounded. In contrast to the masculine principle's emphasis on boundaries, even for the individual, based on its underlying grounding in separateness, the feminine perspective focuses on the connections and connectedness of everything. Not only does this mean that action at one point affects other points, but that in terms of how changes occur and where these changes will lead is non-teleological.

Two primary states of the mother archetype are the elementary and transformative. In the elementary state, the mother "is the one who nourishes, protects, and keeps the child secure..." (Jacobson 1993, 65) The transformative

state accents "the dynamic element of the psyche, where change, movement, and spiritual transformation occur." (Jacobson 1993, 65) While both the elementary and transformative states are essential to the development of the psyche, it is the transformative state that is associated with expansion and creativity.

> Femininity can no longer be limited to responsiveness, passivity, and mothering. It will discover and express its active, initiating creative, and transformative capacity. (Whitmont 1982, 189)

It is in the transformative state that the boundlessness of the feminine is experiences.

> The elemental experience of the dynamic feminine is the base from which flows all later experience of the mystery of spontaneous realization, highlighting the limitations of the established static-masculine order and the unfathomable possibilities in experience. (Hill 1992, 42)

The union of the opposite polarities (static masculine and dynamic feminine) yields a new order.

> ...the birth of a new sense of wholeness that encompasses more fully the inner and outer worlds of experience and the mystery of being...From this affirming state of wholeness and union with oneself arises new initiative, and the cycle begins again. (Hill 1992, 43)

This notion of growth, discovery, and new orders evolving from "self-in-relationship," rather than the "separated self," illuminates the boundlessness of the feminine principle. It reflects the unyielding connection

of all components of the process. To put this in terms of Deming's philosophy, the system can be as large as we want (it can encompass as much as desired), and attention should be on an ever-improving future.

Analogues in TQM

> Point 1: Create constancy of purpose toward improvement of product and service, with the aim to become competitive and to stay in business, and to provide jobs. (Deming 1986, 23)

Deming repeatedly connects the importance of constantly improving quality with the ability to survive in the long-run.

> Problems of the future command first and foremost constancy of purpose and dedication to improvement of competitive position to keep the company alive and to provide jobs for their employees. Are the board of directors and the president dedicated to quick profits, or to the institution of constancy of purpose? The next quarterly dividend is not as important as existence of the company 10, 20, or 30 years from now. (Deming 1986, 25)

In this system customers, suppliers, employees, and society are interconnected in the quest for a better life. For Deming, a better life is constantly evolving and requires the constancy of a continuous quality improvement focus.

Deming's Point 5 (Improve constantly and forever the system of production and service, to improve quality and

productivity, and thus constantly decrease costs) is indicative of the view that the environment is unbounded. In the constant and continuous drive to improve a system, all related aspects are affected.

> Never-ending improvement in manufacturing means continual work with vendors....
> Improvement of the process includes better allocation of human effort. It includes selection of people, their placement, their training, to give everyone, including production workers, a chance to advance their learning and to contribute the best of their talents. It means removal of barriers to pride of workmanship....(Deming 1986, 51)

This is also related to the helix of the PDCA Cycle. Thus, the characteristic of unboundedness refers to connections of all related elements and the timelessness of the quality effort.

Conclusion

The essential principles and techniques of Deming's philosophy have been identified and analyzed for congruence with gender principles. Based on my reading and interpretation of the literature, a case has been made that Deming's philosophy is both incongruent with the masculine principle and at the same time congruent with the feminine principle.

Generically, TQM is congruent with the feminine epistemological stance of "wholeness" and "relatedness."

Deming's view of systems and processes represent an interrelationship of parts in which the whole is greater than the sum of its parts, and yet never loses sight of the individual components. This notion of systems also implies a boundlessness in which the system can be expanded to include more and more components. As Deming explained, a system can be expanded to include society. In fact, the relationship between the individual organization and the goal of providing more jobs and a higher standard of living for society are a central themes in Deming's work.

Each of the corollaries of relatedness were found to be congruent with the principles of TQM. Likewise, a case has been made that TQM is incongruent with the masculine principle's epistemological stance and its corollaries. Again, based on my interpretation, Deming's philosophy can be viewed as having a strong feminine grounding. It therefore represents a radical departure from conventional management theory, and provides the basis for truly innovative changes in modern organizations. The implications of this analysis will be discussed in Chapter 6.

CHAPTER 6

CONCLUSIONS AND IMPLICATIONS

Conclusions

Many claims have been made recently that there is crisis in our organizations and that fundamental changes are needed to resolve their ineffectiveness. While organizations have applied a wide variety of approaches and techniques in attempts to improve performance and efficiency, each has met with limited success and each has usually resulted in a new, or different, set of issues. Lack of success of various management tools and techniques has been attributed to everything from incorrect implementation to the belief that some techniques are inappropriate for certain organizations. I posit that the problems are much more fundamental and that organizations reflect of the social and psychological condition existing in our culture. Therefore, organizational ineffectiveness must be understood in its broadest and deepest sense and resolution of organizational ineffectiveness requires a different approach to understanding and developing strategies. The tinkering and tampering with management techniques proves to be woefully inadequate for fostering the radical changes required to refocus organizational life.

The changes necessary to remedy the current situation

can not be legislated, decreed or mandated, they must be learned and internalized in a way that provides the means of changing the way we conduct our day to day business. If our organizations reflect the psychological imbalance of our society, organizations must change in ways that provide the needed balance. By this, I mean organizational changes that facilitate an elevation of the feminine principle to an equal status of the masculine principle. This requires organizational approaches that value relatedness and wholeness, and their corollaries as essential modes of organizational behavior. In other words, there must be change at the most fundamental level.

W. Edwards Deming's philosophy of continuous improvement, one of the latest management approaches to be considered and applied in U.S. organizations, has a fundamentally different grounding from conventional management approaches. To provide a deeper understanding of TQM, its techniques, and implications, Sorokins' logico-meaningful method has been used to reveal the patterns of consistency between the feminine principle and TQM, and the patterns of inconsistency between the masculine principle and TQM. To facilitate this critical analysis, three theoretical frameworks have been used.

In this dissertation, three related theoretical frameworks have provided a lens for analyzing Western

management theory and W. Edward Deming's management philosophy. Carl Jung's psycho-analytic theory of psychic structure, ego development, and dynamics of the unconscious have provided a basis for understanding the polarities and energy transfer of the psyche. For this study, the masculine and feminine polarities, and their characteristics have been emphasized. Jung's theory of the polarity between the conscious and unconscious, and the effects of repression on the unconscious provide the additional framework required for understanding the importance of the feminine principle to management practices. Related to psychic development is the theory of the "male wound" and its manifestations. According to "male wound" theory, ego development and individuation are different experiences for males and females resulting in gender differences in experiencing the world. While gender differences play a role in both theoretical frames, gender identification is not the focus of this study. While some of the research used to ground this analysis has identified gender differences in the development of the individual, paradigmatic stances, and "ways of knowing," in most instances these differences are not gender specific.

Together, these lens provide a view of management theory and the implications of management theory that are not typically included in mainstream discussion. I believe

that these lens are critically important for the understanding of modern, complex organizations which have dramatically changed from predominately white male enclaves to ones of gender, race, ethnic, and educational diversity. This diversity has initiated much discussion about how to effectively manage the new work place. If these discussions continue to be framed in the masculine principle, I believe that the conflicts will only be exacerbated, innovation will be thwarted, and both personal and organizational development stagnated.

As discussed previously, rationalism, the preferred paradigmatic stance of modernity, is inherently consistent with the masculine principle. Rationalism, based on the belief of the powers of reason, allows us to analyze, understand, and thus control not only our immediate environment, but nature itself. In the management arena, rationalism and the masculine principle are reflected in the various management theories developed to improve performance and productivity. While the masculine bias may seem most apparent in the highly structured scientific management and administrative management schools, it is evident in all conventional management schools, including the human relations school. While humanistic in its facade, the underlying focus of the human relations school is the manipulation of people toward organizational goals of

efficiency and profit by understanding "how people function."

The countervailing paradigm is the feminine principle and its various manifestations. As has been laid out in the previous chapters, the feminine perspective is a fundamentally different way of understanding the world. The feminine understanding of the individual, knowledge, and structure stand in marked contrast to the masculine perspective. It is not that one or the other is good or bad, valuable or worthless, beneficial or detrimental. It is simply that both are viable, but the feminine has been ignored and repressed in Western culture. It is this imbalance that is problematic and in need of attention.

The most fundamental difference in the masculine and feminine principles is the understanding of the basic nature of the world. The masculine principle is grounded in a belief or awareness of "separateness" and objectification. In contrast, the feminine principle is grounded in "wholeness" and relatedness. The corollaries of each of these produce a response to the world that are inherently different.

The Consistencies of Gender Principles to TQM

The paradigmatic stance of the masculine principle is "separateness" and objectification with corollaries of:

- rationally structured settings--ruled

based
- adversarial stance toward the environment with the need to establish control
- de-emphasis of feelings
- competitive relationships yielding one-up-one-down relationships for interaction

Through critical analysis of the texts of Deming's philosophy, there is an apparent inconsistency between the masculine principle and Deming's philosophy of continuous improvement. The most important inconsistency is with the masculine stance of "separation" as a way of viewing the world. Deming's philosophy is overwhelmingly grounded in "relatedness" and addresses problems associated with the notion of separateness. His emphasis on:

- groups
- leadership vs. control
- the gaussian curve
- opposition to contracting with the individual (i.e. incentive systems, performance appraisals)

all deny the notion of "separateness" and isolation of individuals and tasks.

Associated with its preference for rationality, the masculine principle searches for order that is based on hierarchy and status. The scientist's quest for revealing the order of the universe and <u>man's</u> position in this order is consistent with the organizational structures that represent modern public and private enterprises. Our ability and desire to create clean, clear organizational

charts that communicate what and how the organization functions belie the reality that these charts are at best largely inaccurate and at worst are often grossly misleading. In this hierarchical order, the individual (the person or organizational unit), is separated from the various parts of the whole, and people or organizational units work in isolation and competition with others. A competitive, status bound relationship may result in many negative consequences for both the individuals and the organization such as squandered resources, sabotage, defective products and services, psychological problems, and illness.

As with "separateness," the masculine preference for rationally structured settings is also inconsistent with Deming's philosophy. The hierarchical structure and its corresponding rules, procedures, and individual objectives destroy the notion of system by dividing and compartmentalizing people, tasks, and objectives. Accordingly, Deming's philosophy stands in opposition to the use of MBO because its has the negative effect of fragmenting and disjointing efforts. Rather than viewing the organization as a hierarchy, Deming views it more in terms of a flow chart that reflects the processes that are occurring. Deming emphasizes "systems" that are comprised of interconnected components that function interdependently.

In this interconnected system, Deming stresses listening to the customers and suppliers, referred to as the "voice of the process," to determine appropriate actions and decisions.

The hierarchical order reflects the masculine perception of control--meaning control "over." As previously stated, Bacon's desire for science was that of control over nature. This same hierarchical and teleological construct of control is reflected in management structures and practices. We speak of control over people, environments, operations, activities. This control requires the subjugation of that which is controlled, thus giving up any notion of being related to or sharing in a common experience or concern. This notion of control is explicitly and dramatically reflected in the notion of authority (authority over).

The masculine principle's bias towards viewing the environment as hostile and in need of control is inconsistent with Deming's view of cooperation. Deming's belief in cooperative relationships are illustrated in the concept of systems, work teams for developing products and improving quality, and performance appraisals. Deming's philosophy espouses a systems/process approach in which all the interacting components operate cooperatively and collaboratively. It is in this cooperation that continuous

improvement can occur and that the standard of living for everyone can improve. This position is exemplified in TQM's stance towards customers and suppliers. Rather than a competitive relationship, TQM utilizes a long-term, cooperative approach to both customers and suppliers. His strong opposition to annual individual performance appraisal is based in the acceptance of systems and variation. According to Deming, it is the system, and not the individual, that will determine performance. Thus, the notion of the individual performance appraisal is inherently functioning of the system. The competition and rivalry created by individual performance appraisals may demoralize workers, and in fact may actually work against the organization as everyone works in isolation from the whole organization.

In the paradigm of hyper-rationality, the existence of and the potential contribution of feelings are ignored or at least devalued. The masculine denial or avoidance of feelings has been a hallmark of Western organizations and is seen in the extreme value placed on facts rather than feelings. The avoidance of feelings is reflected in management decision making techniques that not only rely on fact but do not acknowledge intuition or other feelings. Employees are encouraged to "think with your head not your heart" and to leave any personal problems "at home." The

valued individual is one who relies on hard, cold analysis in decision making and is able to remain disconnected from both the decisions and people. Frederick Taylor's preference was for an organization that was devoid of and unencumbered by human feelings. Likewise, Herbert Simon disparagingly refers to values as nothing more than feelings in his theory of administrative decision making. Cliches such as: leave your personal problems at home; this decision is no reflection on you; think about the consequences, etc. pervade the rational organizational world. The individual who allows feelings to be part of interaction and decision-making is generally perceived as weak, ineffective, or otherwise problematic. Some research indicates that managers who have made intuitive decisions have developed rational, analytic explanations afterwards because of their fear of the rejection of their decision or how they will be perceived. Deming both accepts and values feelings. Deming's belief in intrinsic motivation, pride in work, joy in learning, the unknowable, and knowing the worker are all examples of how feelings, as well as facts, are part of TQM's philosophy.

In contrast to the denial of feelings, there is an awareness of and valuing of "unknowables," figures that are incalculable, in Deming's philosophy. Although these unknowables do not fit into the objective, rational mind

set, they are critically important to the effectiveness and long-term survival of the organization. These unknowables include everything from happy or unhappy customers and losses from performance appraisals, to pride in workmanship. All have significant impact on the organization. Likewise, feelings, such as joy of learning and pride of workmanship, are integral components of TQM.

Not only are the tenets of Deming's philosophy inconsistent with the masculine principle, they are consistent with the feminine principle.

The Feminine Principle

The feminine principle illuminates a different world view and the energy and interaction of its components. If, as previously stated, the essence of the masculine principle is order, objectification, and rationality, the essence of the feminine principle is relatedness, process, and a sensitivity to feelings or intuition. The corollaries of relatedness include:

- a view of the person as emergent from relationship
- a epistemological stance of experience as knowledge
- an interactive and iterative nature of experience
- an unbounded environment

The feminine principle is represented in the ways of

communicating, decision making, and structuring that are most frequently associated with the "ways of women." Although these characteristics, or modalities, may be most frequently observed in females, they are not restricted to the female gender.

Relatedness, as described previously, entails a bonding at the level of the unconscious. In relatedness there is a connection based on common experience and a shared project of endeavor. Deborah Tannen (1990) states that communication patterns of women reflect a desire to confirm a bond of common experience and natural development. Women, whom she says repeat the "theme" of conversations, confirm a common experience and commitment. The female tendency toward reiteration appears to be that of confirmation. Males, on the other hand, position themselves with a "one up" reiteration of the "theme," which results in hierarchical structures and competition.

I would posit that the fundamental issue of TQM is relatedness or wholeness. According to Deming, this relatedness extends both internally and externally to the organization, and encompasses the whole of society. By constantly improving organizational processes, the standard of living for all individuals is raised through more jobs, better products, and happier workers. Deming's teachings about systems, the removal of barriers, driving out fear,

the importance of knowing the work and the worker, and the role of the worker all are consistent with the feminine concept of relatedness.

The feminine "ways of knowing" have been described as different from that masculine tradition of gathering and analyzing objective facts. The feminine principle's relatedness encourages a contextual knowing that includes conscious and unconscious, objective and subjective, individual and group, and experience as facets of understanding the world. As Belenky (et al. 1986) described, the feminine way of knowing is "a connected epistemology, in which truth emerges through care." Recent research on creativity and innovation reveals the importance of intuition. Techniques that have highly feminine, though not explicitly so, characteristics have been developed to help release intuitive capacity and enhance decision making. In many instances, these require the dissolution of organizational structure and rules, the support of a group context, and the ability to initiate action.

Deming's profound knowledge, operational definitions, run-charts, control charts, triangle of interaction, and PDSA Cycle all reflect the notion of knowledge of experience and relatedness. Profound knowledge is an experienced based understanding of the system and the related components of profound knowledge. The components form a complex, or

interdependent dynamic, in which each part is integral and all parts must be included. It is the actual experience, rather than the projected experience, that determines operational definitions. And it is the measurement and analysis of actual performance through run-charts and control charts that will reveal whether or not the system is in control, and thus the appropriate action to take. The iterative nature of experience and knowledge are analogous to the triangle of interaction, the PDSA Cycle, and the helix of continuous improvement derived from the PDSA Cycle.

The feminine notion of authority is in direct opposition to the rule bound masculine authority. In the feminine perspective, authority is seen as emergent, dynamic, and related. Mary P. Follett's "law of the situation" is an example of the feminine idea of authority. The authority of appropriate behavior emerges out of the sharing and interaction of the various components of the situation, and is only appropriate at that particular time. As the situation changes, so will the "law of the situation."

Related to this is the masculine preference for abstraction. The rules themselves are abstractions that remove the person and passions or feelings from the environment or decision making. For the feminine, it is not the rule or how things should be that is paramount, but it

is the actual experience with its feelings, relationships, and outcomes that become the essence of decision making and authority. Ulanov (1971) describes this relatedness as:

> the psychic urge to relate, to join, to be in-the-midst-of, to reach out to value, to get in touch with, to get involved with concrete feelings, things, and people, rather than to abstract or theorize.

This describes both Follett's "law of the situation" and Deming's principles of TQM as they reflect an authority "with". As previously discuss, there is an overwhelming congruence of the feminine principle with Deming's management philosophy. This congruence has significant implications for management and organizational life.

Implications

In this study, the consistencies of the masculine principle and conventional management have been identified and discussed. Likewise, the inconsistencies of the masculine principle and Deming's management philosophy, and the consistencies of the feminine principle and Deming's management philosophy have been identified and discussed. While this makes the case that there is a different gender principle for TQM, this alone does not communicate the importance of this gender principle difference. At issue, is the important role that TQM may play in the release of

the positive feminine in modern Western organizational culture which has repressed the feminine and with the necessity of a principle implementation of TQM.

Jungian theory of repression is of significant importance to understanding the development of "healthy" organizations. Bernstein's research traced the effects of the repressed feminine in modern organizations. The repressed feminine, in the form of the Devouring Mother, subtly entices and lulls the individual into a false sense of security and control, and in doing so entraps the individual. It is this "security," that leads to individual and organizational stagnation and dependency. As Bernstein suggests, a means of releasing the positive feminine from the unconscious is needed. A vehicle is needed to facilitate the conscious expression and elevation of the positive feminine with its emphasis on relatedness. By establishing a balance with the masculine, an environment for individual growth and development will exist and the potential for real innovation will be achieved. In terms of organizations, one vehicle for this release may be the principled implementation of Deming's management philosophy for the transformation of organizations.

A key issue is the **principled** implementation of Deming's philosophy. By principled implementation, I mean implementation that focuses on TQM's ontological grounding

in the feminine principle. The importance of a principled implementation of this management innovation is to ensure the inclusion and elevation of its feminine characteristics. In this way, the truly innovative aspect of Deming's TQM will not be lost. Because of the generic nature of our organizational problems, the overwhelming bias toward the masculine perspective, there are powerful forces in play that will encourage the twisting of TQM's implementation into ways and applications that are consistent with the masculine bias.

At issue are two very different scenarios with different outcomes. In one scenario, there is a failure to understand the feminine grounding. In this case, the techniques, maybe even selected techniques, and not the philosophy of TQM will be applied in organizations. These applications will be implemented in rather typical ways and will meet worker resistance or ambivalence. The impact may range from sporadic and isolated success to abysmal failure. Because of the lack of understanding of the fundamental difference, TQM will become "another flavor of the month" that will loose support and fade away leaving organizations to continue in their masculine biased world.

Examples of the way in which TQM has been, or may be bastardized, are the selected use of parts of Deming's philosophy, the warping of selected elements, and the

attempt to apply TQM to limited or problem areas only. One of the most resisted and rejected elements of Deming's philosophy is the demand to abandon individual performance appraisals. The resistance is based on everything from the fear that managers will lose control if employees are not evaluated to the long standing reliance on individual motivational theories. Management's refusal to abandon the use of individual performance appraisals reflects the lack of understanding of the very essence of Deming's philosophy, systems. This notion of a system is applicable at two levels. First is the understanding of the concept of a system and the futility of holding individuals responsible for the results of the system. Secondly, Deming has stressed repeatedly that his management philosophy must be accepted as a whole and components cannot be selectively used or disregarded.

Another example of unprincipled implementation is the ways in which organizations have responded to Deming's understanding of customers and suppliers. As stated previously, Deming's approach to customers and suppliers is one of cooperation and collaboration that yields long-term mutually beneficial relationships. Many organizations attempt to apply TQM and continue to rely on a host of suppliers selected by least-cost bid. Suppliers are not trusted nor included in product development and delivery,

and they are forced into destructive competitive relationships that tend to result in short-term cost control and long-term demise. Deming's belief that the customer determines quality and thus organizations must listen to their customers has been reformulated to the pressure on employees to be "nice" to customers. Not only does this reflect the lack of understanding of the relationship with customers, but reflects the instrumentalist approach of manipulation.

The tendency of organizations to jump on the quality bandwagon and later drop the initiative is contradictory to the long-term and systemic nature of TQM. The cultural changes necessary to institutionalize TQM require time, money, and commitment of the organization. This commitment must include top management, and must include the necessary resources. Florida Light and Power is an example of an organization that was very successful with its quality initiative, but has recently abandoned it. The new president of FL&P is not supportive of TQM, and I would speculate feels the need to put his own spin on the company, and has redirected organizational resources. This start and drop experience only reinforces the perception that TQM is just another management technique, another flavor of the month, that management uses to manipulate employees. This spells disaster for any kind of principled implementation of

TQM or the benefits that can be derived from a principle implementation.

Other adulterations of Deming's philosophy are the continued use of: quotas and numerical goals; MBO; isolated and uninformed application of statistical techniques; quality circles with no means of ensuring changes; down sizing to relieve financial problems; lack of investing in all employees; short-term measures of effectiveness; and desire for instant success. If this unprincipled implementation continues, the likely consequences are that organizational life will continue to get worse, organizations will try to compensate for the deteriorating conditions with more technical control, economic conditions will worsen, and the human condition will become more segregated and precarious. An alternative is a principled implementation of Deming's philosophy.

The second scenario is one in which the consistency of TQM with the feminine principle is recognized and embraced. This will provide the basis of a revolutionary and fundamental transformation of organizations. It is important to remember that this is not a superficial, selective application of techniques, but is a cultural transformation of the organization from top to bottom. The transformation will require time, resources, and training to learn a new way of doing business. The very essence of the

transformation is the awareness of, and knowledge of "systems" in which every part, or sub-system, is related to the whole. This relatedness necessarily means a different way of conducting business. By seeing the connections between internal and external customers and suppliers, collaborative and cooperative relationships become a natural way of conducting business. The ramifications of this basic understanding of relatedness are monumental.

Some management writers state that Deming's philosophy is actually conventional management repackaged for the 90s. (Duncan and Van Matre, 1990; Harrison and Stupak, 1993) This, I believe, is a superficial reading of his work. Deming has stated explicitly that this is a transformation of organizations and business, that requires a fundamentally different stance. While the techniques of statistical quality control were developed in the early part of this century, its implications under TQM reflect the "wholistic" understanding of systems and variation which necessitate a different management approach to work, workers, and organizational life.

No longer can the various tasks and individuals be seen as isolated, they must be understood as part of an interconnecting web of activities and individuals that can be lead toward the constant aim of continuous improvement. The notion of boundaries and boundedness are out of place in

this view of a system. And this reflects the feminine notion of wholeness. The consistencies between the feminine principle and the tenets of Deming's TQM are overwhelming. Likewise, the inconsistencies between the masculine principle and the tenets of TQM are just as apparent. With this argument in place, the claim can be made that Deming's philosophy of continuous improvement may be a vehicle for the release of the positive feminine. It is the release of the positive feminine that will bring the masculine and feminine polarities into a balanced relationship.

By providing a mechanism for the positive release of the feminine principle, a better balance may be achieved and the flow of energy move to an exchange between the positive masculine and feminine poles. According to Jungian theory, it is in this balanced relationship and energy flow that development can take place. This, of course, has promised benefits of growth and development at the individual, organizational, and social levels. As we approach the 21st century, with its diversity, global economy, and changing technology, we must have the capacity to anticipate, adjust to, and accommodate complexities that we can scarcely imagine. We must be open to new and different ways of encountering the world--the feminine way.

REFERENCE LIST

Anschutz, Eric. 1989-90. The Star-Spangled Toyota. The Bureaucrat, Winter, 27-31.

Aguayo, Rafael. 1990. Dr. Deming: The American Who Taught the Japanese About Quality. New York: Simon & Schuster.

Ballon, R. J. 1983. Non-Western Work Organizations. Asia Pacific Journal of Management. 1: 1-14.

Barnard, Chester I. 1968. The Functions of the Executive. Cambridge, Massachusetts: Harvard University Press.

Belenky, Mary Field; Blythe McVicker Clinchy; Nancy Rule Goldberger; Jill Mattuck Tarule. Women's Ways of Knowing The Development of Self, Voice, and Mind. New York: Basic Books Inc., 1986.

Bernardin, H. John and Richard W. Beatty. 1987. Can Subordinate Appraisals Enhance Managerial Productivity? Sloan Management Review, Summer, 63-73.

Berstein, Jerome S. (1980). The Decline of Rites of Passage: The Impact on Masculine Individuation. Unpublished doctoral dissertation. C.G. Jung Training Center, New York City.

Bolen, Jean Shinoda. 1984. Goddesses in Everywoman a New Psychology of Women. New York: Harper and Row, Publishers.

Bonser, Charles F. 1992. Total Quality Education? Public Administration Review. 52. September/October. No. 5. 504-512.

Bowles, Jerry G. Focusing on the Customer. Fortune, 119, (June 5): 213.

_____. 1990. The Human Side of Quality: A Celebration of the American Worker. Fortune, 122 (Sept. 24): 13.

Brown, Tom. 1989. Quality is (a lot of) Jobs Won. Industry Week, 238 (Oct. 16): 7.

Burr, . 1953. Engineering Statistics and Quality Control. New York: McGraw-Hill.

Burrell, Gibson and Gareth Morgan. 1979. Sociological Paradigms and Organisational Analysis. Portsmouth, New Hampshire: Heinemann.

Carr, David and Littman, Ian D. 1990. Excellence in Government Total Quality Management in the 1990s. Arlington, VA: Coopers & Lybrand.

Case, John. 1987. Zero-defect Management. Inc., 9, (Feb.): 17.

Chodorow, Nancy J. 1978. The Reproduction of Mothering: Psychoanalysis and the Sociology of Gender. Berkeley: University of California Press.

_____. 1989. What is the Relation Between Psychoanalytic Feminism and the Psychoanalytic Psychology of Women?

Corcoran, Elizabeth. 1989. Quality Conscious: Even Techniques for Quality Are Imported. Scientific American, 261, (July) : 75.

Cortes-Comerer, A. 1986. JIT is Made to Order. IEEE Spectrum, September, 57-62.

Creedon, Lawrence. P. 1989. After the Bottle: In Quest of Zero Defects. Business Month, 134, (Dec.): 91.

Crosby, Philip B. 1979. Quality is Free the Art of Making Quality Certain. New York: Mentor Books.

de Castillejo, Irene Claremont. 1973. Knowing Woman. New York: Harper & Row, Publishers.

Deming, W. Edwards. 1982. Quality, Productivity, and Competitive Position. Cambridge, MA: Massachusetts Institute of Technology.

_____. 1985. Transformation of Western Style of Management. Interfaces, May-June, 6-11.

_____. 1986. Out of the Crisis. Cambridge: Massachusetts Institute of Technology.

_____. 1992. The New Economics for Education,

Government, Industry.

Denhardt, Robert B. 1984. Theories of Public Organization. Monterey, California: Brooks/Cole Publishing Company.

Dobyns, Lloyd. 1990. Ed Deming Wants Big Changes, and He Wants Them Fast. Smithsonian, 21 (August): 74.

Dobyns, Lloyd and Clare Crawford-Mason. 1991. Quality or Else. Boston: Houghton Mifflin Company.

Drago, Robert. 1988. Quality Circle Survival: An Exploratory Analysis. Industrial Relations, 27, No. 3 (Fall): 336-351.

Dreyfus, Joel. 1988. Victories in the Quality Crusade; a Growing Number of U.S. Companies Are Getting Religion About Better Products and Services. Fortune, 118, (Oct. 10): 80.

Drucker, Peter F. 1988. The Coming of the New Organization. Harvard Business Review. (January-February). 45-53.

_____. 1990. The Emerging Theory of Manufacturing. Harvard Business Review, 68, (May-June): 94.

Duncan, Jack W. and Joseph G. Van Maatre. 1990. The Gospel According to Deming: Is It Really New? Business Horizons, 33, (July - Aug.): 3.

Dunphy, Dexter C. 1987. Convergence/Divergence: A Temporal Review of the Japanese Enterprise and its Management. Academy of Management Review. Academy of Management Review. 12, No. 3:445-459.

Dusky, Lorraine. 1990. Bright Ideas: Anatomy of Corporate Revolution:. Working Woman, 15 (July): 58.

Eisler, Riane. 1987. The Chalice & The Blade. San Francisco: Harper.

English, Jon, and Anthony R. Marchione. 1983. Productivity: A New Perspective. California Management Review. 25, No. 2:57-66.

Feigenbaum, A. V. 1983. Total Quality Control. New York: McGraw-Hill.

Fowler, Elizabeth M. 1990. New Focus on Quality Control. The New York Times, 139 (Aug. 28): p. C17 col. 5.

Fox, Elliot M. 1968. Mary Parker Follett: The Enduring Contribution. Public Administration Review. (November/December). 520-529.

Fox, Elliot M. and L. Urwick, (Eds.) 2nd. 1973. Dynamic Administration: The Collected Papers of Mary Parker Follett. London: Pitman Publishing

Friedman, Richard B. On the Concept of Authority in Political Philosophy. In Richard E. Flathman (Ed.), Concepts in Social & Political Philosophy (121-146). New York: Macmillan Publishing Co., Inc.

Gabor, Andrea. 1988. The Leading Light of Quality: An Innovative Florida Utility Borrows a Page from Japan, Inc. U.S. News & World Report, 105, (Nov. 28): 53.

_____. 1990. The Man Who Discovered Quality. New York: Times Books.

Gadon, Elinor W. 1989. The Once & Future Goddess. San Francisco. Harper & Row, Publishers.

Gartner, William B. and M. James Naughton. 1988. The Deming Theory of Management. Academy of Management Review. Vol. 13:138-142.

Garvin, David A. 1986. Quality Problems, Policies and Attitudes in the United States and Japan: An Exploratory Study.: Academy of Management Journal. 29, No. 4:653-673.

_____. 1987. Competing on the Eight Dimensions of Quality. Harvard Business Review, 65, (Nov. - Dec.): 101.

_____. 1988. Managing Quality The Strategic and Competitive Edge. New York: The Free Press, 1988.

Gilligan, Carol. 1982. In a Different Voice Psychological Theory and Women's Development. Cambridge: Harvard University Press.

Griffin, Ricky W. 1988. Consequences of Quality Circles in an Industrial Setting: A Longitudinal Asseessment.: Academy of Management Journal. 31, No. 2:338-358.

Grossman, John. 1989. When Quality Isn't Free. Inc., 11 (Dec.): 28.

Gulick, Luther and L. Urwick (Ed.). 1937. Papers on the Science of Administration. New York: Institute of Public Administration.

Hamson, Ned. 1990. Excellence & Quality Now! Forbes, 145, (April 16): p. A1.

Hanson, Royce. 1991. NAPA Identifies Six Governmental Crisis. PA Times, 14, no. 8 (August): p. 1, 12.

Harding, M. Esther. 1990. The Way of All Women. Boston: Shambhala

Harmon, Michael M. and Richard T. Mayer. 1986. Organization Theory for Public Administration. Boston: Little, Brown and Company.

Harrison, Stephen J. and Ronald Stubak. 1993. Total Quality Management: The Organizational Equivalent of Truth in Public Administration Theory and Practice. Public Administration Quarterly. 16, No. 4. (Winter): 430-459.

Hill, Gareth S. 1992. Masculine and Feminine. Boston & London. Shambhala.

Hopper, Kenneth. 1982. Creating Japan's New Industrial Management: The Americans as Teachers. Human Resource Management. (Summer). 13-31.

_____. 1985. Quality, Japan, and the U.S. The First Chapter. Quality Progress. (September). 34-41.

Hummel, Ralph. 1987. Behind Quality Management: What Workers and a Few Philosophers Have Always Known and How it Adds Up to Excellence in Production. Organizational Dynamics. Summer: 71-78.

Hunt, Raymond G. 1984. Taking Mayo and McGregor Seriously.: Review of Managerial Engineering: Techniques for Improving Quality and Productivity in the Workplace. by Ryuji Fukada. In California Management Review. 27, No. 1:173-176.

Ishikawa, Daoru. 1985. What Is Total Quality Control? Englewood Cliffs, N.J.: Prentice-Hall, Inc.

_____. 1987. The Quality Control Audit. Quality Progress, January, 39-49.

_____. 1989. How to Apply Company wide Quality Control in Foreign Countries. Quality Progress, September, 70-74.

Jacobson, Kaaren Hedblom. 1993. Organization and the Mother Archetype: A Jungian Analysis of Adult Development and Self-Identify Within the Organization. Administration & Society. 25, No. 1 (May): 60-84.

Jesperson, Fred F. 1989. Once More With Feeling: Quality Starts at the Top. Business Month, 134 (Aug.): 65.

Johnson, Robert A. 1974. HE Understanding Masculine Psychology. New York: Harper and Row Publishers.

Joiner, Brian L. 1985. The Key Role of Statisticians in the Transformation of North American Industry. The American Statistician, 39, No. 3 (August): 224-227.

Jones, Roger S. 1982. Physics as Metaphor. New York: New American Library.

Jones, Kathleen B. 1987. On Authority: or, Why Women Are Not Entitled to Speak. Nomos XXIX, Yearbook of the American Society for Political and Legal Philosophy. Edited by J. Roland Pennock and John W. Chapman.

Jones, Peter. 1987. The American Who Saved Japan. Scholastic Update, 119 (April 6): 8.

Juran, Joseph M. ed. 1951. Quality Control Handbook. N.Y.: McGraw-Hill.

Katz, Donald R. 1988. Coming Home. Business Month, 132, (Oct.): 56.

Keller, Evelyn Fox. 1980. Baconian Science: A Hermaphroditic Birth. The Philosophical Forum. 3. (Spring): 299-308.

Kohn, Alfie. 1986. No Contest: The Case Against Competition. Boston. Houghton Mifflin Company.

Kronenberg, Philip S. and Renee G. Loeffler. 1991. Quality Management Theory: Historical Context and Future Prospect. Journal of Management Science Policy

Analysis, 8, nos. 3 & 4 (Spring /Summer): 204-221.

Laza, Robert W. and Perry L. Wheaton. 1990. Recognizing the Pitfalls of Total Quality Management. Public Utilities Fortnightly, April 12, 17-21.

Leader, Charles. 1989. Making Total Quality Management Work: Lessons From Industry. Aviation Week & Space Technology, 131 (Oct. 30): 65.

Leonard, Frank S. 1988. The Case of the Quality Crusader. Harvard Business Review, 66 (May-June): 12.

Levine, Charles H. 1986. The Federal Government in the Year 2000: Administrative Legacies of the Reagan Years. Public Administration Review. (May/June).

Little, John. 1992. C.I. Lewis's Conceptual Pragmatism: Values and Ethics for Public Administrators?. An unpublished manuscript.

Lincoln, James R., Mitsuyo Hanada, and Kerry McBride. 1986. Organizational Structures in Japanese and U.S. Manufacturing. Administrative Science Quarterly. 31:338-364.

Locke, Edwin A., Karyll N. Shaw, Lise M. Saari, and Gary P. Latham.P. 1981. Goal Setting and Task Performance: 1969-1980. Psychological Bulletin, Vol 90, No. 1: 125-152.

Mangeldorf, Martha E. 1989. Why 99.9% just Won't Do. Inc., 11 (April): 26.

Mann, Nancy R. 1987. The Keys to Excellence The Story of the Deming Philosophy. Tokyo: Diamond Publishing Company.

Maslow, A. H. 1943. Psychological Review, 50 (July): 370-396.

Mathews, Jay. (1993, June 6). Total Quality Management. The Washington Post. pp. H1, H16.

McGregor, Douglas. 1957. The Human Side of Enterprise. Management Review. (Nov.)

_____. 1985. The Human Side of Enterprise. New York: McGraw-Hill Book Company.

Modic, Stanley J. 1988. What Makes Deming Run? Industry Week, 236, (June 20): 84.

Moreau, Dan and Carol Chapman. 1989. Change Agents; W. Edwards Deming is the American Who Taught the Japanese How to Compete. Changing Times, 43 (Sept): 132.

Moskal, Brian. 1989. Never Say 'Perfect': But Suppliers Must Think It All the Time.: Industry Week, 238 (Feb. 20): 35.

_____. 1990. Quality Cow Gives Free Milk; Maybe there is such a Thing as a Free Lunch. Industry Week, 239 (Mar. 19): 27.

Nonaka, Ikujiro. 1988. Creating Organizational Order Out of Chaos: Self-Renewal in Japanese Firms. California Management Review. 30, No. 3:57-73.

Nonaka, Ikujiro, and Johny K. Johansson. 1985. Japanese Management: What Aabout the 'Hard' Skills? Academy of Management Review. 10, No. 2:181-191.

Odajnyk, Volodymyr Walter. 1976. Jung and Politics The Political and Social Ideas of C.G. Jung. New York: New York University Press, 1976.

Oliver, William H. (address) 1990. The Quality Revolution; Internally First, Externally Second. Vital Speeches, 56 (Aug. 1): 625.

Ouchi, Williiam G. and A. M. Jaeger. 1978. Type Z Organization: Stability in the Midst of Mobility. Academy of Management Review. Nov. 3:305-314.

Parker, L. D. 1984. Control in Organizational Life: The Contribution of Mary Parker Follett. Academy of Management Review. 9, No. 4:736-745.

Perrow, Charles. 1986. Complex Organizations: A Critical Essay. Third Edition. New York: Random House.

Peters, Richard S. Authority. In Richard E. Flathman (Ed.), Concepts in Social & Polaitical Philosophy (146-156). New York, Macmillan Publishing Co., Inc.

Phillips, Stephen, Amy Dunkin, James B. Treece and Keith H. Hammonds. 1990. King Customer. Business Week, Mar. 12.

Pines, Ellis. 1990. TQM Training: A New Culture Sparks Change at Every Level. Aviation Week & Space Technology, 132, (May 21): p. S38.

_____. 1990. From top secret to top priority: The Story of TQM. Aviation Week & Space Technology, 132 (May 21): p. S5.

_____. 1990. The Gurus of TQM: After Years of Neglect, TQM Thinkers Now Have an Audience. Aviation Week & Space Technology, 132 (May 21): p.S29.

Port, Otis. 1989. For Engineers, a Shortcut to Taguchi Quality Control. Business Week, July 31, 97.

Progoff, Ira. 1953. Jung's Psychology and its Social Meaning. New York: Dialogue House Library.

Richardson, Laurel; Taylor, Verta. 1983. Feminist Frontiers Rethinking Sex, Gender, and Society. New York: Random House.

Ringle, William M. 1981. The American Who Remade 'Made in Japan'. Nation's Business, February, 67-70.

Rohan, Thomas M. 1987. Japan Hasn't Lost Lead; U.S. Efforts Still Miss the Mark, Juran Says. Industry Week, 234, (Sept 7): 28.

_____. 1988. Mandate Rather Than Motivate: 'The Team Must Be Assigned to do a Job, Not be Motivated or Inspired'. Industry Week, 236 (May 2): 58.

_____. 1988. Quality hide-and-seek; Are Companies Fooling Themselves on Data? Industry Week, 237 (Dec. 5): 29.

_____. 1989. The U.S. and Quality; a New Culture. Industry Week, 238 (April 17): 43.

_____. 1989. Don't Waste Time on Laggards. Industry Week, 238 (Aug. 21): 20.

Samuels, Andrew. 1985. Jung and the Post-Jungians. New York: Routledge & Kegan Paul.

Scherkenbach, William W. 1985. Performance Appraisal and Quality: Ford's New Philosophy. Quality Progress, April, 40-46.

_____. 1990. The Deming Route to Quality and Productivity Road Maps and Roadblocks. Rockville, MD: Mercury Press.

_____. 1991. The Deming Road to Continual Improvement. Knoxville, Tennessee: SPC Press, 1991.

Schmidt Mary R. Alternative Kinds of Knowledge and Why They Are Ignored. Unpublished manuscript.

Scholtes, Peter R. 1987. An Elaboration on Deming's Teachings on Performance Appraisal. Madison, WI. Joiner Associates Inc.

Scholtes, Peter R. 1990. The Team Handbook. Madison, WI: Joiner Associates Inc.

Scholtes, Peter R. and Heero Hacquebord. 1988. Beginning the Quality Transformation, Part I. Quality Progress, July, 28-33.

_____. 1988. Six Strategies for Beginning the Quality Transformation, Part II. Quality Progress, August, 44-48.

Schroeder, Dean M., and Alan G. Robinson. 1991. America's Most Successful Export to Japan: Continuous Improvement Programs. Sloan Management Review. 32, No. 3:67-81.

Scott, William. B. 1989. TQM Expected to boost productivity, Ensure Survival of U.S. Industry. Aviation Week & Space Technology, 131 (Dec. 4): 64.

Shelburne, Walter A. 1988. Mythos and Logos in the Thought of Carl Jung. Albany: State University of New York Press.

Shewhart, W. A. 1931. Economic Control of Quality Manufacturer Products. N.Y.: D. Van Nostrand Co.

Silvers, Ronald Jay. 1966. The Logic and Meaning of the Logico-Meaningful Method. Canadian Review of Sociology and Anthropology, 3 (Feb.): 1-8.

Simon, Herbert A. 1976. Administrative Behavior. Third Edition. New York: The Free Press.

Sjoberg, Gideon, and Roger Nett. 1968. A Methodology for

Social Research. New York: Harper & Row.

Sklarow, Gene. 1989. Zero Defects: Old Theme - New Twist. Industry Week, 238 (July 17): 35.

Slass, Robert. 1988. Turning Deming's Points into Action. Industry Week, 236 (June 20): 14.

Sorokin, Pitirim. 1957. Social & Cultural Dynamics A Study of Change in Major Systems of Art, Truth, Ethics, law and Social Relationships. Boston: Porter Sargent.

Smith, Steve. 1987. How to Quantify Quality. Management Today, Oct., 86.

Stivers, Camilla. 1993. Gender Images in Public Administration. Newbury Park: SAGE Publications.

Sullivan, Jeremiah J. 1983. A Critique of Theory Z. Academy of Management Review. 8: 132-142.

Swiss, James E. 1992. Adapting Total Quality Management (TQM) to Government. Public Administration Review. 52: No. 4 (July/August): 356-362.

Taguchi, Genichi, Don Clausing, Connie Dyer and Lance A. Ealey. 1990. Robust Quality; Design Products not to Fail in the Field; You Will Simultaneously Reduce Defectives in the Factory. Harvard Business Review, 68 (Jan-Feb): 65.

Tannen, Deborah. 1990. You Just Don't Understand Women and Men in Conversation. New York, William Morrow and Company, Inc.

Taylor, Frederick Winslow. 1931. Scientific Management. New York: Harper & Brothers Publishers.

Tsurumi, Yoshi. 1981. American Mgt. Has Missed This Point. The Point is Management Itself. Dial (Sept)

Ulanov, Ann Belford. 1971. The Feminine in Jungian Psychology and in Christian Theology. Evanston: Northwestern University Press.

Van Riper, Daniel. 1983. The American Administrative State: Wilson & The Founders--An Unorthodox View. Public Administration Review (Nov/Dec).

Wadsworth, Harrison M.; Stephens, Kenneth S.; Godfrey, A. Blanton. 1986. Modern Methods for Quality Control and Improvement. New York: John Wiley & Sons.

Wagenheim, George D. and John H. Reurink. 1991. Customer Service in Public Administration. Public Administration Review. 51: No. 3 (263-270).

Walton, Mary. 1986. The Deming Management Method. New York: Putnam Publishing Group.

Weber, Max. The Types of Authority and Imperative Co-ordination. In Richard E. Flathman (Ed.), Concepts in Social & Political Philosophy (102-121). New York: Macmillan Publishing Co., Inc.

Weick, Karl. 1979. The Social Psychology of Organizing 2nd ed. New York: Random House.

Whitmont, Edward C. 1990. Return of the Goddess. New York: Crossroad Publishing Co.

Wolf, James F. 1988-89. The Legacy of Mary Parker Follett. The Bureaucrat. (Winter). 53-57.

Wood, Stephen. 1989. The Japanese Management Model Tacit Skills in Shop Floor Participation. Work and Occupations, 16, No. 4 (November): 446-460.

Zweig, Connie (Ed.). 1990. To Be A Woman. Los Angeles. Jeremy P. Tarcher, Inc.

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B.S.: Business Administration and Economics, Appalachian State University, 1970. (Major: Management)

Additional Course Work:

James Madison University, 1985.
Catholic University of America, 1980.
George Mason University, 1979.

Work Experience:

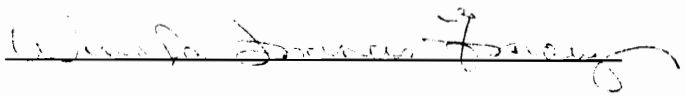
1975-present: Northern Virginia Community College, Program Head of Business and Accounting, Woodbridge Campus, professor of business administration.

1971-1975: Gaston College, Dallas, NC, instructor of business administration and economics.

1966-1970: Belks Inc., Eden, NC, credit clerk

Management Consulting/Training:
Total Quality Management Seminars and Workshops

Action Research for Financial Planning Services, Dept. of Army

Group facilitator for Eastern Prince William County Chamber of Commerce

Supervisory Training and Assessment, Dynatech Inc., Alexandria, VA.