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Looking for Evidence of the TFW Virus

A DISSERTATION

SUBMITTED TO THE FACULTY OF THE COLLEGE OF EDUCATION, LEADERSHIP AND COUNSELING OF THE UNIVERSITY OF ST. THOMAS

By

Chato B. Hazelbaker

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

DOCTOR OF EDUCATION

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ABSTRACT

On an almost daily basis I am confronted with stories or examples of people disengaged at work, or stories of managers who are frustrated by their inability to engage employees. In many cases, work simply is not working. Researchers at the ISEOR Institute in France have identified a root cause of organizational dysfunction they have worked with throughout Europe and Latin America that may explain some of the flaws of the modern workplace. ISEOR researchers have determined that management ideology is largely based on the modern interpretation of three proponents of scientific management; Taylor, Fayol, and Weber. Thus they named this ideological flaw the TFW Virus. This was an interpretive case study seeking to discover if management practices of American organizations reveal and transmit the TFW Virus. The study took place at Manufacturing Corp., a high tech business in the Pacific Northwest of the United States and included interviews with 19 individuals in middle management and line worker positions. In the study I found that the workers did express that they experienced depersonalization and a need to submit to the organization at work. Additionally, I found the four elements of the virus; an aristocratic view, apathy, separation, and massification. While this study may not be applicable to other organizations, it does indicate clearly that there is value in looking at the ideological influences of American management to determine if there are foundational flaws leading to organizations that are inhumane and unproductive. Even in a very successful American organization where people reported they were happy the elements of the virus were easy to find, indicating that that virus may be prevalent throughout organizations in America.

TABLE OF CONTENTS

List of Tables	iii
Chapter 1:	Error! Bookmark not defined.1
Background	
Problem Statement	
Purpose of the Study and Research Question	3
Significance	
Definitions	4
TFW Virus	5
Depersonalization	5
Submission	5
Aristocratic View	5
Apathy	5
Separation	6
Management	
Chapter 2: Literature Review	
The Socio Economic Approach to Management and	d the TFW Virus7
Contributors to the Virus	
Describing the TFW Virus	
Key Elements of the Virus	
Manifestations of the Virus	
The Transmission of the Virus in North Americ	a 18
Summary	
Chapter 3: Methodology	
Research Design and Rationale	
Site of the Study	22
Gaining entry to the site	
Data Collection	
Data Analysis	
Protection of Human Subjects	
Chapter 4: Findings	
Interview Process	
Data Analysis Process	
Interview Results and General Observations	
Individual Introductions to Supervisors	
Individual Introductions to Floor Workers	
Themes	
Theme 1: Expressed sentiment that Manufacturing	
Stability	
Positive management relationships	
The commitment to and implemenation of Lean	
Individual Introductions to Floor Workers	
Theme 2: Individual feelings of unimportance	
Low expectations for role of work in life	
No chance for advancement	48

Lack of control	49
Boredom	50
Theme 3: Suspicion and Mistrust	51
Communication problems	34
Interpersonal Conflicts	
Favoritism	53
Complaints of others' work ethic	
Theme 4: Isolation and separation	
Separation in the hierarchy	56
Separation across shifts	58
Theme 5: A Common View of Management	59
Management as command and control	
A common path to management	
Connecting themes and evidence of the TFW virus	61
Depersonalization and submission	65
An aristocratic view of the organization	
Apathy	68
Separations	69
Conclusion	69
Chapter 5: Discussion, Conclusions, and Recommendations	
The Extent of the Discovery of the TFW Virus in American Organizations	72
The Extent of the Discovery of the TFW Virus in American Organizations An ideology exists that is having an effect on behavior in the organization	72 n72
The Extent of the Discovery of the TFW Virus in American Organizations An ideology exists that is having an effect on behavior in the organization Depersonalization and Submission	72 n72 73
The Extent of the Discovery of the TFW Virus in American Organizations An ideology exists that is having an effect on behavior in the organization Depersonalization and Submission	72 n72 73
The Extent of the Discovery of the TFW Virus in American Organizations An ideology exists that is having an effect on behavior in the organization Depersonalization and Submission	72 n72 73 75
The Extent of the Discovery of the TFW Virus in American Organizations An ideology exists that is having an effect on behavior in the organization Depersonalization and Submission	72 n72 73 75 77
The Extent of the Discovery of the TFW Virus in American Organizations An ideology exists that is having an effect on behavior in the organization Depersonalization and Submission	72 n73757777
The Extent of the Discovery of the TFW Virus in American Organizations An ideology exists that is having an effect on behavior in the organization Depersonalization and Submission	72 n7273757777
The Extent of the Discovery of the TFW Virus in American Organizations An ideology exists that is having an effect on behavior in the organization Depersonalization and Submission	72 n73757777777578
The Extent of the Discovery of the TFW Virus in American Organizations An ideology exists that is having an effect on behavior in the organization Depersonalization and Submission	72 n73757777777578
The Extent of the Discovery of the TFW Virus in American Organizations An ideology exists that is having an effect on behavior in the organization Depersonalization and Submission	72 n727575757575788585
The Extent of the Discovery of the TFW Virus in American Organizations An ideology exists that is having an effect on behavior in the organization Depersonalization and Submission	72 n727575757575788585
The Extent of the Discovery of the TFW Virus in American Organizations An ideology exists that is having an effect on behavior in the organization Depersonalization and Submission	72 n7275757575757581858687
The Extent of the Discovery of the TFW Virus in American Organizations An ideology exists that is having an effect on behavior in the organization Depersonalization and Submission Aristocratic View Apathy Separations Aristocratic View Why it Matters for Manufacturing Corp. Implications for Management and Leadership. Implications for Further Research. Connecting SEAM to Critical Theory Researcher's Bias Delimitations and Limitations.	72 n727575757575788185868690
The Extent of the Discovery of the TFW Virus in American Organizations An ideology exists that is having an effect on behavior in the organization Depersonalization and Submission	72 n727575757575788185868690
The Extent of the Discovery of the TFW Virus in American Organizations An ideology exists that is having an effect on behavior in the organization Depersonalization and Submission Aristocratic View Apathy Separations Aristocratic View Why it Matters for Manufacturing Corp. Implications for Management and Leadership. Implications for Further Research. Connecting SEAM to Critical Theory Researcher's Bias Delimitations and Limitations.	72 n7273757775788185868791
The Extent of the Discovery of the TFW Virus in American Organizations An ideology exists that is having an effect on behavior in the organization Depersonalization and Submission	72 n72737577757881858690919191

List of Tables

Table 1. Themes and Key Quotes	41
Table 2. Connecting the Themes and the TFW Virus	64

Chapter 1

Background

"Fine," is the word that I do not care if I ever hear again to describe how someone feels about their workplace. However, every indication is that if I were to leave my office on any given day and ask a dozen people how they felt about their workplace the answer I would get would be "fine." In my analysis Americans are not very excited about work this epidemic of disengagement is not just my imagination. Gallup's (2013) "State of the American workplace report" classifies 70% of the American workforce as disengaged with an annual cost of \$450 to \$550 billion. In starting work on this project, I was interested in finding out more about why we are so disengaged, and why there seems to be so little conversation about what work being "fine" really means and what affect that has on organizations. I also wanted to learn more about why Americans seem to expect so little of our workplaces.

During my doctoral work, I had the opportunity to study the Socio Economic Approach to Management (SEAM) as founded by Henri Savall at the ISEOR institute in Lyon, France. SEAM is an approach to management that has been tremendously successful in helping organizations thrive, improve the lives of workers, and improve economic returns. Its success is partly rooted in the fact that it is one of the most closely studied change management programs in the world (Conbere & Heorhiadi, 2011). The body of knowledge is expanded through ISEOR, the institute teaching SEAM. ISEOR maintains an extensive database of outcomes from SEAM interventions, and contributes to an ongoing field of study through conferences, articles and books.

Through ISEOR, Vincent Cristallini (2011) and his colleagues have identified what they see as an underlying ideological flaw in the approach to management and used the analogy of a

virus to help explain its impact. They have named the virus TFW for Taylor, Fayol, and Weber, the three individuals they credit with promoting the management ideology that is at the heart of the virus. Taylor and Taylorism is well known to Americans with backgrounds in manufacturing. Taylor was one of the first to do time studies in factories near the turn of the previous century. He is credited with developing the idea of hyper-specialization, and separating the management of the task from the individual performing the task (Cristallini, 2011). American readers do not as commonly recognize Fayol and Weber. Fayol is French and Weber is German. Fayol was a proponent of the separation of business functions and specialization (Cristallini, 2011). A sociologist, Weber built an ideal model for organizations based on rules, a system which largely mirrors the modern idea in America of a legal bureaucracy.

The TFW virus became increasingly intriguing to me when I looked at current management literature for the contributions of Taylor, Fayol, and Weber. In the Blackwell Encyclopedia of Sociology all three men appear under the heading "Management Theory" (Chanlat, 2007). Taylor is credited in that piece with being a critical player in the formation of management theory and his work is tied directly to companies such as McDonald's that have used approaches tied to Taylorism to create a uniquely American, yet globally dominant organization. As noted by Chanlat (2007), Fayol is a contemporary of Taylor whose work was largely ignored outside of France until the 1940's when it was translated and used to help support and build on Taylorism. Fayol's idea came out of the mining industry, and reflective of the social forces that affected his work his ideas promote a top down and sometimes paternalistic approach. In the article it is noted that Weber's focus was bureaucracy which Chantal (2007) calls a "… master concept within the classical canon of management thinking."

The idea that the problem with modern management practices is ideological in nature is intriguing because it may help explain why organizations do not follow management practices that would lead to more effective organizations and happy healthier workers. Put simply, they cannot. According to the thinkers at ISEOR, the foundation of the house is built on shaky ground, and therefore management practices as they have been built in organizations cannot stand.

Problem Statement

Despite decades of attention, there is no shortage of bad management and it does not appear to be getting better. "Many employees are highly cynical about the effectiveness of management" (Feldman, 2000, p. 1286) one article put it, going on to support the point using both quantitative research from highly respected academics and more anecdotal evidence like the popularity of Scott Adams' Dilbert cartoon. There are serious organizational consequences of bad management. From an organization perspective, there are millions of dollars lost and sometimes legal consequences from bad management (de Juan, 2003).

When it comes to looking at management practices and even the way management is taught there is not a shortage of material either. However, in my research I found little that questioned the ideology that underlies management.

Purpose of the Study and Research Question

The purpose of this interpretive case study was to discover if management practices in America revealed evidence of the TFW virus. By understanding the management practices that reveal the TFW virus, organizations would be able to look more closely at the virus and some of the strategies employed in SEAM to improve management practices. The research question was, "Do management practices of American organizations reveal and transmit the TFW Virus?"

Significance

This study is significant because it provides a starting place for a discussion of the ideological core of management in American organizations through the lens of a well-studied international change management approach and ideology. The study indicates that the TFW Virus exists in American organizations, and is having an effect on those organizations. Since the TFW Virus is ideological in nature, its presence is infecting organizations at a foundational level. This foundational flaw may explain why the strategies currently being employed to change and adapt in American businesses do not work. Taking the metaphor of the virus one step further, efforts at organizational health are being undermined by this underlying virus. Treating the symptoms is like taking a cough drop for pneumonia. While the effort of taking the cough drop provides very temporary relief, it does nothing to treat the underlying cause of the organism's sickness. In this case I think of efforts like changing pay or incentive structures are a cough drop, not addressing the underlying ideological assumptions about individuals relationship to work. An organization can change the pay structure or incentives, but that is only going to provide temporary relief to the problems underlying organizational health caused by the TFW Virus.

Definitions

There are a number of terms that are critical to understanding this research and its implications. Particularly because much of the original writing on SEAM and the TFW Virus and in French it is important to define these terms. There are some terms defined below specific to the TFW Virus, and another set of terms used to define the terms used throughout the paper to describe the American workplace.

TFW Virus: A metaphor used to represent the ideology that has formed from the application of the work of Frederick Taylor, Henri Fayol, and Max Weber. It is marked particularly by the maximal division of labor, separation of conception and execution in the workplace and depersonalization of jobs. Evidence of the virus can be found in depersonalization and submission in the workplace (Conbere, Heorhiadi & Cristallini, 2014).

Depersonalization: A key element of the virus, depersonalization is the view of the worker as a machine, simply another piece in the puzzle (Cristallini, 2011). Depersonalization is the effect of not having individual approaches to work, and treating those in the workplace as though the individual is unimportant; another resource to be used that is replaceable and interchangeable with any other worker.

Submission: The essential concept behind submission is that individuals trade their freedom for money. They essentially sell their work and part of that agreement is that they make their desires subservient to the needs and desires of the organization for which they work. A symptom of the virus, "Submission assumes that the individual complies with the requirements, because it accepts the principle of subordination, it is docile and waives his freedom and his aspirations." (Cristallini, 2011, p. 3).

Aristocratic view: A manifestation of the virus (Cristallini, 2011) this is the view of the workplace in which some are chosen to a special or privileged class and other types of workers and placed in another lower class. This is related to Weber's *Protestant Ethic and the Spirit of Capitalism* (1930), in which Weber posits that Puritanism led to the belief that if you are successful you must by favored by God (Conbere, Heorhiadi & Cristallini, 2014).

Apathy: Another manifestation of the virus (Cristallini, 2011), this is the view of workers, who as an effect of the TFW Virus, have little interest in their work and no hope that

their workplace will be better or more humane. Cristallini (2011) also categorized this as non-cooperation, in that people do not invest fully in their work. Later scholars Conbere and Heorhiadi (Conbere, Heorhiadi & Cristallini, 2014) used the term blindness as a related phenomenon noting, "Our blindness prevents us from seeing, and thus we become unable to hope that it is possible to implement organizations which are flexible, cooperative and more livable" (p. 8).

Separation: One of the effects of the virus is an organization marked with borders, walls, fences, boundaries and territories (Conbere, Heorhiadi & Cristallini, 2014). This separation comes in a variety of forms, including the division of tasks, hierarchies in the organizations, and divisions in the organization based on job type, degree status, or other factors. The key is to separation as defined by the TFW Virus is that a maximum number of walls are created in the organization, not allowing the organization to act holistically.

Management: The process of aligning resources in order to achieve the goals of the organization (Chanlat, 2007). This is used throughout the paper to describe "Managers" those entrusted with the task of aligning resources, and more broadly as management for the group of people who align resource. Simply put, effective management means achieving organizational goals that are sustainable over a broad range of time. Ineffective management, for the purpose of this study, is defined by management that irrespective of short term results does harm to the long term prospects of the company or organization.

Chapter 2: Literature Review

This case study sought to find evidence of the TFW virus. The goal of the literature review was to describe the TFW Virus, taking apart its individual strands to see where the virus began, and how it replicates in organizations. Like a doctor's questionnaire, the literature review was intended to ask questions to know the patient's history and find the source of the presenting symptoms.

The Socio Economic Approach to Management and the TFW Virus

In the 1970's the Socio Economic Approach to Management (SEAM) was created in France as a systematic approach to management. Henri Savall and a group of researchers sought to integrate classical scientific management theories with the human relations school (Savall, 2010). The goal was to recognize and integrate the human factor, which according to the SEAM founders was overemphasized by the neoclassical human relations school and underappreciated by the traditional proponents of scientific management. What emerged was SEAM, which found its home at ISEOR. In 1973 ISEOR was created to manage SEAM consulting, and later doctoral work in SEAM (Savall, 2010).

There are many distinctive elements of SEAM and many foundational values that make it different than other change management systems. SEAM is carried out by a team of consultants, who are referred to as intervener researchers. This title reflects the consultant's role as both a consultant in the change process, and in continuing the research work of ISEOR.

Key to SEAM is the concept of hidden costs (Savall, 2008). Hidden costs are economic inefficiencies that come from what SEAM researchers label dysfunctions. Dysfunctions can be explained as the gap between what is planned or directed and what actually occurs in the

organization. By getting rid of the dysfunctions, an organization can release untapped potential allowing greater growth, new ideas, and cost savings.

SEAM classifies looks for dysfunctions in any of six categories: working conditions, work organization, time management, communication-coordination-cooperation, integrated training and strategic implementation. By finding dysfunctions in these areas and revealing their costs, SEAM finds additional revenue that can be returned to the bottom line, create potential for individual growth which will benefit the organization, and provide a better working environment.

SEAM's focus on developing human potential separates it from many other change management systems. One reflection of this focus on human potential is that the proponents of SEAM chose the term "actors" to describe employees as a reflection of the value that, "By focusing on people, management can develop new income through reducing hidden costs and performance" (Conbere & Heorhiadi, 2011, p. 10). As an example, SEAM largely rejects layoffs as the first level of cost reduction in a time of financial crisis, instead focusing on how to build the potential in the workforce through reassignments, retraining, or creating new lines of business.

In SEAM intervener-researchers both participate in change projects and are responsible for the ongoing addition to knowledge. Intervener-researchers add to the body of knowledge about change management through ISEOR's SEAM database, conference presentations, books and papers.

SEAM has proven to be incredibly profitable in the companies where it has been implemented. Because of the ongoing additions to the database, SEAM intervener researchers can demonstrate the effect of their interventions across a variety of industries and non-profit organizations in international settings. The SEAM data base has been developed over the past 33

years, with over a million hours of research work. SEAM is a well-studied form of change management (Savall, 2008). Today, SEAM intervener researchers can look at companies as diverse as bakeries and town councils and prior to the intervention make predictions about what percentage of hidden costs are in the organization.

From the beginning, SEAM was concerned about not just making organizations more effective, but also in studying the causes of the six dysfunctions. Early on, Savall (2013) suggested there was a flaw in the classic economic models. The classic models left out the human component. In searching for why this human element had been left out, the team at ISEOR identified that it was due to an overreliance on scientific management. They saw this particularly in the elements of scientific management as put forth by Frederick Taylor, Henri Fayol and Max Weber. ISEOR observed scientific management had an ideological flaw. Simply put, some of the ideas that these men had based their models of management on were wrong. In some cases it was if the world had accepted the answer was four, but never looked to make sure the original problem was two plus two.

Acknowledging that scientific management had an ideology was important to understanding the TFW virus. Ideology "... describes the system of beliefs, values, and practices that reflects and reproduces existing social structures, systems and relations (Brookfield, 2005, p. 68)." An ideology is put forth as the true system of belief within the dominant group and is propagated as the one true way.

Savall and his contemporaries at ISEOR observed that what was at the core of the scientific management was an ideology. That ideology was based on the work Taylor, Fayol, Weber.

Taylor, Weber, and Fayol not only wrote about their views of work, they also wrote and talked extensively about their views on workers and the role of work and human behavior.

Secondly, there are practices which each man put forth based on those beliefs. Finally, by the time the team at ISEOR were having these discussions, the virus was the dominant belief which they saw propagated through management education, writing, and consulting.

The ideas and tactics of these men had spread like a virus and have become what the world knows as management. Therefore, Savall and the researchers at ISEOR coined the term TFW virus, and sought to make the eradication of the virus key in SEAM interventions.

SEAM interventions reeducate the organization in order to provide an antidote to the TFW virus. This education begins at the very beginning of the consulting engagement with the organization at the very top levels. The goal of this initial engagement according to Savall and Zardet (2008) is to show the problems or dysfunctions that are caused by implementing the classic management approaches, particularly those practices that separate strategic and operational problems or dismiss the human elements of work.

Contributors to the Virus. These three men who lent their initial to the TFW virus are linked by more than common ideology. They were contemporaries, and we know that Fayol had read *Principles of Scientific Management* (Parker & Ritson, 2005). Modern writers in business often use Taylor, Fayol, and Weber together to talk about the foundation thinkers of scientific or classical management (Wren & Bedeian, 2009).

All three men were concerned with the division of tasks and control. All three also wanted to propose the "best way" of doing things in order to ensure peak efficiency. They also shared a belief in rationality (Schreurs, 2000). As their ideas were linked by scholars, and as the concept of scientific management grew, their ideas were spread by a number of factors particular

to the 20th century including the emergence of American business education, the explosion of manufacturing industries, and the globalization of ideas that occurred partly due to the World War I.

Taylor is best known as a founding voice in scientific management who brought a passion for order and rationality to his work. "Frederick W. Taylor's definition of efficiency was to organize work as an analogue of the machine process" (Merkle, 1980).

Taylor studied at Exeter when he was sixteen and had passed the Harvard entrance exams when his academic career was derailed by health concerns (Merkle, 1980). He changed course, apprenticed at a factory and quickly started working carving a new path for himself studying production processes in factories. He eventually became one of the first management consultants. His primary writings are found in his book *Principles of Scientific Management* (1911). The core issue for Taylor was efficiency. Before a special House Committee of the U.S. Congress Taylor made the case that the "... awkward, inefficient, or ill-directed movements of men," was the greatest loss to the nation (Taylor, 1947). In those same remarks he focused on the need to scientifically study management to avoid inefficiency. "For Taylor, developing a science, an art, means gathering traditional knowledge, classifying, tabulating, and reducing this to a set of rules, laws and formulae which are immensely helpful to the workmen in doing their daily work" (Schreurs, 2000, p. 738).

Taylor began his work helping to increase the efficiency of work by employing time studies, and other tools to break down tasks and find ways to do them more efficiently. Taylor's view was not microscopic to just individual tasks, but his entire approach was about seeing the entire organization gain efficiency, the outcome he saw for this was greater prosperity for both

workers and the company (Schreurs, 2000). There are four key duties of management in *Principles of Scientific Management* that demonstrate Taylor's thinking (1911):

- Develop a science, or set of rules and guidelines for each part of each person's work
- Scientifically select workers according to merit, and train them in the best way to complete to a task
- Enthusiastically cooperate with workers to ensure that work is being done according to the scientific principles developed
- Divide work equally between the workers and the management, thus workers are responsible for the actual task, but management is responsible for planning, and developing work rules

Fayol was a mining engineer who published his master work *Administration Industrielle* et *Générale* in France in 1916. Throughout his stellar career as a manager of a vast mining company, Fayol had taken notes, developed theories, and spoken about the need to develop management skills that were different than those he had developed as an engineer (Wren & Bedeian, 2009).

Fayol is crediting with identifying separate functions that are at the core of management. He labeled these: planning, organizing, command, coordination, and control. He is also well known for his thoughts on the division of labor, and was among the first to develop specialized work teams (Wren & Bedeian, 2009). Fayol's legacy has been lasting, "Fayol's managerial functions are frequently cited as the inspiration for the contemporary practice of dividing managerial activity (and management textbooks) into the elements of planning, leading, organizing and controlling" (Parker & Ritson, 2005).

Weber was born in Germany to wealth, and of the three contributors to the TFW virus is the one who did not write from experience in his career, but was a rather curious intellectual (Wren & Bedeian, 2009). One of his published works was *The Protestant Ethic and the Spirit of Capitalism*.

Weber is known particularly for his writings on bureaucracy and legal structures (Parker & Ritson, 2005). His view of bureaucracy was not the modern definition of a tangled mess of paperwork, but rather a system of governance that allowed business to prosper and maximize efficiencies across the divided workplace. According to Weber, a bureaucracy has formal rules that are both rational and efficient. Weber argued that a machine like bureaucracy was the best way to an efficient organization. One of the things that the rules were meant to provide in the organization was protection against passions or emotion, but rather the bureaucrat was always to defer to the rules of the organization (Fry & Nigro, 1996). Key to this was his idea that a proper bureaucracy was the best way to bring large groups of people under a central authority. His idea was that the central authority set and enforced the rules, which would lead to efficiency (Schreurs, 2000).

Several of the core components of the virus started as Taylorism, became more widely known as scientific management, and today is really just called management (Chanlat 2007) and (Heames 2009). It has been a steady march. When the Academy of Management was asked to update their list of the top 10 outstanding contributors to American business management thought and practice Taylor was named number one, Weber two, and Fayol five (Heames 2009).

Taylor's work was spread by his book, his work and the success of his techniques in helping the United States in World War I. The productivity of the American industrial machine was seen as a huge competitive advantage in the war, and was largely credited to the concept of

scientific management (Kennedy, 2012). Additionally, the work of Taylor was being discussed just as American universities were developing management education. (Merkle, 1980).

Management education in the United States has achieved a high level of influence since the Second World War (Engwall, 2007).

Fayol and Weber's works had to wait until they were translated into English in order to achieve widespread discussion in the United States, but contemporary management writers make the case that they have had a profound impact on the development of management (Wren & Bedeian, 2009).

In looking for a connection to between American management education and the TFW virus there are several initial indications that American management practices have been strongly influenced by the key players the TFW virus is named for and their ideas. One author in his defining the American approach to management stated that there are strong cultural values, but noted that many authors also find, "An entrenched belief in the Tayloristic principles of 'scientific management'" (Festing, 2012, p. 40). One can see that the roots for this may be the Carnegie and Ford studies of the 1950's which were commissioned to find out what was "wrong" with management education. The recommendations were that business curricula should focus more on scientific management principles (Engwall, 2007).

Fayol's work has been called foundational to the establishment of management theory, noting that his work filled a vacuum of knowledge about management theory (Pryor & Tanajea, 2010). There is evidence of Fayol's work in the work of contemporary management guru John Kotter (Fells, 2000) and Porter (Pryor & Tanajea, 2010). The concept that setting goals is a management task is found in Fayol's work and that element of strategic planning is found also in Porter and Kotter.

Describing the TFW virus. From the beginning, the work of Taylor, Fayol and Weber has been a focus of research and discussion for ISEOR. Essentially, SEAM is the solution to the problem the researchers named the TFW Virus. Savall first put forth the metaphor of the virus in 1973 (Cristallini, 2012). He used the metaphor of a virus for three reasons:

- The virus was ideological in nature, contaminating decision making and analysis at a foundational level
- The virus caused changes in organizational structures and behavior
- The virus was continually transmitted within and to other organizations through training, practice, and management education

In his article "The role of governance in the fight against the global pandemic of the techno-economic virus," Cristallini (2011) wrote extensively about the virus as the root cause for the hidden costs and dysfunctions that ISEOR finds in organizations. He asserted that organizations are carrying this hidden virus. It is going undiagnosed, and current organizational change efforts are treating symptoms of the virus rather than the core problems of the organization which is the presence of the virus.

The TFW virus infects organizations with an ideological flaw at a foundational level. Since organizational behaviors are based on this flawed ideology the organization is less effective than it has the potential to be. This is evidenced by the work of ISEOR as interventions consistently find hidden costs that can be returned to the bottom line. These ideological underpinnings go unnoticed because few are looking there, and there are powers in place that discourage any one looking at the foundation.

Key elements of the virus. The virus promotes a specific view of individuals that is core to the idea of SEAM, that is that for organizations to thrive they need to grow human potential.

The key way that the virus inhibits this growth is by spreading a false view of individuals and their potential. Cristallini (2012) made the case that the proponents of the TFW virus view individuals as untrustworthy, and not intelligent or responsible. The individual is not free. In contrast to this, SEAM sees the individual as creative, and able to grow, change, and be trusted to do what helpful to the organization given the chance.

The virus promotes the view of individuals as untrustworthy with the health of the organization and even the protection of their own interests. This baseline belief about the individual leads to the conclusion that individuals must be controlled in order to do what is in their best interest and the best interest of the organization. The effect of this view of individuals is manifested in the symptoms of the TFW virus.

Manifestations of the Virus. Two key resources helped define the four manifestations of the virus I used in the study. One was Cristallini's (2011) original work of which I had a translation from the French, and the second was a working paper by Conbere, Heorhiadi & Cristallini (2014) which further refined the concepts of the TFW Virus and built on them. While there is some difference in terms, there is agreement that the virus can be observed in workers and in the organization in the exhibition of (Cristallini, 2011):

- Depersonalization and Submission
- An aristocratic view of the organization
- Apathy
- Separation

Cristillani (2011) argued two concepts promoted by the founders of the TFW Virus are depersonalization and submission. Cristallini (2011) explained depersonalization as the individual giving way to the needs of the organization. "Submission assumes that the individual

complies with the requirements, because it accepts the principle of subordination, it is docile and waives his freedom and his aspirations" (p. 3). Depersonalization at its core is looking at the worker as a machine. The individual is unimportant; another resource to be used that is replaceable and interchangeable with any other worker (or possibly a machine).

Cristallini used the word massification to explain the concepts of depersonalization and submission. One image that Cristallini (2011) gave for massification was herding cattle. In the workplace that exhibits evidence of the virus there is a herder, and then there are the workers, who are the cattle who must be pushed along. No cow is different, and the job of management is simply to get the cattle to move in the right direction.

As defined by Cristallini (2011), submission occurs when individual aspirations and preferences give way to organizational good. More than just existing as a second consideration, individual aspirations and preferences must be in some ways suppressed in order to achieve organizational goals. Massification is also the result of the technocratic nature of organizations where the virus is present. Organizations are governed by rules and systems that are inflexible. Organizational rules, procedures, and standards, replace dialogue between understanding and intelligent individuals, unable to handle the unexpected and complexity because of their structure.

"The TFW virus is profoundly marked by an aristocratic view of organizational life" (Conbere, Heorhiadi & Cristallini, 2014, p. 4) Cristallini (2011) argued that the separation of menial and noble tasks within an organization is evidence of the virus. Since some tasks are considered more important, the people who have the more important tasks are considered more important. This leads to artificial hierarchies. Time and energy are spent on the management of the hierarchy rather than on tasks related to the mission of the organization.

Apathy, or a lack of interest in work, results from a lack of hope. Conbere, Heorhiadi & Cristallini, (2014) used a similar concept in the term "blindness," noting, "Our blindness prevents us from seeing, and thus we become unable to hope that it is possible to implement organizations which are flexible, cooperative and more livable" (p. 8).

In his original work Cristallini (2011) explained apathy partly as non-cooperation, "The virus has the effect of encouraging individuals and groups to withdraw their known world and not to open outwards" (p. 6). This non-cooperation is the workers way of disengaging essentially because the organization does not incent workers to cooperate. Apathy is a key to the virus because apathy means people are resigned to whatever happens, who do not feel that they can or even should affect change in the organization (Cristallini, 2011).

Another way the virus manifests itself is in separations or divisions in the workplace, marked by borders, walls and fences. One reason for these walls is hyperspecialization or the separation of functions based on faulty logic. Cristallini (2011) saw a linkage between the separation of tasks and an increase in egotism and selfishness. He said the virus is observed when group effort is not recognized; instead individual tasks in very specialized areas are encouraged and promoted. People are not rewarded for teamwork and cooperation, but rather excellence in their own small task. Therefore the focus is not on making the whole better, but rather on making oneself look better. This non-cooperation is evidence of the virus as well, as hyperspecialization is rewarded over teamwork and the effect on others is not considered. The virus encourages the building of walls between areas of the organization.

The Transmission of the Virus in North America. In North America the effect of accreditation standards, common textbooks, and a market that appears to reward more prestigious institutions defined by ranking also has the effect spreading the virus. Dean Robert

Sullivan of Kenan-Flagler Business School noted that in his opinion the top five rated business schools according to *U.S. News and World Report* define what is professionally acceptable, while the remaining schools simply follow that lead (Engwall 2007). Using textbooks as one example, previous studies have found that textbooks do in fact include significant amount of homogeneity (Ferguson, Collison, Power, & Sevenson, 2006). Even though the authors found the dominant texts were largely the same in their singular perspective of both ethical considerations and the western approach and definition of capitalism the power to change the textbooks was outside the grasp of either the authors or the editors.

Two articles with interesting perspectives regarding the American approach to management as implemented in other countries or regions provide further indication that what is classically taught as management can be defined as American. In discussing what he calls the Americanization of the Australian workforce, Gould (2010) put forth tenets that define the western approach to employment relations. Specifically he looked at the diminishing importance of unions, using individual employee productivity to determine compensation and encouraging individual workplace bargaining. His research is able to articulate and define a western or American approach that can be compared across organizations. There is a similar theme in Neal and Finlay's (2007) paper on American hegemony as it relates to business education in the Arab world. Much of Neil and Finlay's arguments are based on the idea that the western way is in some ways better. Thus, it is worth looking closely at the ideology that is being spread to an entirely new corner of the world which was previously without this ideology.

Further evidence can be found that scientific management and the ideas of Taylor are not only a key concept in academia but central to more popular works such as those of management guru Peter Drucker, "Taylor's views were not only essentially correct but they have been well

accepted by management" (Locke, 1982, p. 22). Criticism of Taylor in this article is noted as being, "predominantly or wholly false" (Locke, 1982, p. 22). Drucker claimed that Taylor's impact on the modern world should be considered alongside Karl Marx and Sigmund Freud (Locke, 1982).

Taylor particularly seemed to be well aware that he was looking to spread and ideology, not just management practices. "The Scientific Management movement was considerably more than a movement for the application of science in management. It was the means of converting industrial technology into ideology" (Merkle, 1980, p.81). Taylor took this role seriously, not just promoting his ideas in companies, but by testifying before congress, advocating for the inclusion of scientific management in college curriculum and giving conference presentations. (Kennedy, 2012)

Summary. There are many metaphors the proponents of SEAM use to communicate the important concepts. When asked to build a second story onto an existing house the first place a builder looks is the foundation. It is not the strength of the walls that ultimately tells the builder how high the building can go, but rather how strong the foundation is. The current foundation for management may be strong enough to build a single floor, or in some cases more. However, the ideological flaw is foundational, it could be the reason that at the end of many change management programs and fad managers and workers are still left looking for more, satisfied in the short term with some quick wins but ultimately unable to maintain either the outcomes or the enthusiasm.

Chapter 3: Methodology

This was an interpretive research project based on the fact that as a researcher I bring to the question my own bias, which could not be completely separate from the research. While I will discuss bias later in this section, the inability to be a truly neutral observer seemed obvious as I had heard something that piqued my interest in the TFW virus, and I was therefore interested in looking for it.

Research Design and Rationale

Case study was the methodology that I chose because I was specifically interested in the stories of the participants and I wanted to be open to emerging design, and able to follow those stories where they led me. The depth of the descriptions gained in a case study was another reason the method was chosen (Creswell 2007). In this case, I looked for evidence of an ideology and that required depth because I wanted to get past the surface behaviors and see if I could find evidence for what was behind these behaviors.

Case Study is a deep analysis of one setting (McMillan, 2008). Further, that one setting is done in a real-life context rather than in the laboratory. Case studies have a long tradition in education research and Stake (1978) made the point that they were a preferred method of research, because the methods of the case study and the real life setting were in harmony with the way people make generalizations about their own lives.

One of the three reasons that researchers choose case study is to develop possible explanations of behavior (Stake, 2008). Case study can be effectively used to test or examine existing theories. Since I was looking for evidence of the virus as defined by Cristallini this line of inquiry seems particularly fruitful.

The case study methodology also required the use of multiple sources and in this case, I conducted interviews, completed observations, and reviewed documents related to the experience of individuals in the organization. This particular study also meets the case study requirement that the case was bounded. Stake (2008) defined a bounded system as having boundaries of time, and place. In this case, the boundaries are people who are currently employed in one organization and actively working shifts in the organization.

Site of the Study

In order to answer the research question effectively I needed to find a site that would fit specific criteria. My preference was for a manufacturing facility because that is the type of workplace where scientific management got its start. The criteria included it needed to be a forprofit business in the United States. It needed to be located geographically in a place where I would have relatively easy and affordable access to.

I also needed to identify an organization with more a number of employees so that I would increase the diversity among the pool of interviewees. I also need a company which would provide me access to information about the company and allow me to be on their site to do the interviews.

My preference was for an organization that had demonstrated generally good financial returns and was not in crisis so that I could observe the organization in as close to normal circumstances as possible. I wanted to ensure that there was no obvious external factor, like mass lay-offs or a recent transition in leadership.

I refer to the site that was selected for the dissertation as Manufacturing Corp. to keep the confidentiality of the organization. Manufacturing Corp. is a manufacturing facility in the Pacific Northwest of the United States. The company owns similar manufacturing plants across

the United States with a corporate headquarters in California. At the plant I studied they make high tech products that are used in other products. They would be more known as a business to business technology company, with consumers not directly buying their products but finding the products produced by Manufacturing Corp. in many of the technology products they buy. The company as a whole is publically held with over a billion dollars in annual revenue.

Gaining Entry to the site. Using my professional contacts, with advice from my dissertation committee I prepared a statement about what I would like to do in the study. I sent this executive summary to several individuals with contacts in American businesses who forwarded it on to their contacts for me. It took several months to find a site. The initial summary piqued the interest of several companies and led to one on one conversation for further explanation with three different companies. All of them ultimately decided that they could not take part in the study for different reasons. Eventually, Manufacturing Corp. contacted me and I had an initial meeting with the controller to explain the study. This meeting was followed up with the plant manager, and then finally with a member of the management team who could help me set up the interviews.

In the end, my sample included one senior manager, six supervisors who reported to that manager, and two randomly chosen team members under each of the supervisors for a total of 19 interviews. The senior manager was chosen as the only one at his level, and all of the six supervisors chose to participate in the study. Under each supervisor there are approximately twenty team members. To select who I would interview in each team, the senior manager and I assigned a number to each member of the team, and then sitting in his office I used a random number generator to pick the number of the person I would interview. That fact that the senior manager groaned a bit as certain numbers were read led me to believe that I had a mix of what he

considered high performers along with some lower performers. He confirmed this when we put together the final list.

Data Collection

Case study relies on the use of multiple points of data (Gall, Gall, & Borg 2007). It also relies on the researchers entering the site in a way that will allow them to get the best data and have full access to the experience of those they are studying. (McMillan 2008). In order to work through the process in a way that was both comfortable to the participants and yielded the data I needed for the study, I had several conversations with Manufacturing Corp. The initial interview explained the parameters of the study and what I would need. The second focused on the same thing with the local executive and then became a conversation about the logistics. Among the things that they asked for and I provided to them was an email to employees explaining the project which I provided. It took three months from the initial contact to the meeting where we scheduled the on-site interviews, but from there things moved very quickly. I met with the senior manager on a Thursday, and by the next Wednesday I was conducting interviews.

Before I began conducting interviews I had the opportunity to complete some document review and do some initial observations. The documents that I reviewed included the published annual report and several documents on the website. Additionally, an internet search for the company name turned up several articles about the companies activities. Before my interviews I was also able to tour the plant which gave me insights into the overall working conditions.

For the interviews, I visited Manufacturing Corp. on three occasions. Each time I interviewed the two shift supervisors along with four individuals working that shift. The first interviews were done with the swing shift, which works from midday to midnight. Each interview took approximately 30 minutes and was held in a small conference room. The swing

shift interviews started at 8 p.m., the day shift interviews the next morning at 7:30 a.m., and finally the overnight shift a day later at 4 a.m.

One of the challenges of these interviews was that I was looking for specific evidence of the virus, but I did not want to introduce the concept of the virus to them because that would prejudice their responses. Therefore, I started the interviews with a set of six questions but used an unstructured approach that allowed me to follow up on particular areas of interest. The initial questions were:

- 1. Tell me what you do at Manufacturing Corp.?
- 2. When you are talking with friends or family what do you tell them about what it is like to work here?
- 3. Tell me about a time you were excited or energized in your work?
- 4. What keeps you from feeling like that consistently?
- 5. Tell me about a time you were discouraged?
- 6. What causes discouragement when it happens?

During the first interview and in subsequent interviews I added two questions. One was, "What are the qualities of good supervisors," and the second was "What are the qualities of poor supervisors?" To all of the supervisors I also added the question, "How do you think you learned to become a manager?" These questions emerged during the interviews for reasons I will discuss in my findings.

The final two steps in the process were going back to the plant and doing a final interview with the manager who had helped me schedule the interviews and following up with some of the particular interview subjects who had indicated at the end of the interviews that they

were willing to talk further. This second round of interviews was done by phone. Through the final round of interviews I clarified the data to test for agreement with my conclusions as to the presence of the virus

Data Analysis

I used an interpretational analysis model (Gall, Gall & Borg 2007) to analyze the data collected. With 19 interviews and other artifacts it was important to structure the data carefully as to not miss insights.

As I conducted the research, I took hand written notes along with taping each of the interviews. I created transcripts from the interviews. I did this myself rather than have a transcriptionist because I knew from previous experience that this time would allow me to look at the data and the process of having to put it into the computer allowed me additional time with the data. I also typed up sheets about the visual observations and put those into my notes. These typewritten notes were done within a week after the first interviews so that I did not lose the freshness of the data.

After the data were collected, the first step was for me to read through my notes one to familiarize myself with the data. This gave me the opportunity to compare my data and find spots that were not clear, so I knew where to follow up or go back to the handwritten notes.

The next step in the process was to develop categories of data. A category is a specific type of phenomenon that comes out during the research (Gall, Gall & Borg 2007). Since I was looking for some specific types of categories in the data analysis stage it was important to look for categories which both indicated and counter indicated the presence of the virus. For instance, one of the categories that I looked for was "depersonalization" because that would indicate the virus according to Cristallini. However, I also looked for counter indicators, such as how the

actors felt personally esteemed. Based on Conbere, Heorhiadi & Cristallini, (2014) I looked for the four main symptoms of the virus:

- An aristocratic view
- Apathy
- Separation
- Massification

Each of these four symptoms have specific categories and sub explanations which were used in the analysis. After developing categories from the data, I then went through the data another time coding the data for specific instances which fit under certain categories.

Protection of Human Subjects

I used the consent form provided by the University of St. Thomas Institutional Review Board (IRB) and all information was kept confidential. The confidentiality of the data was ensured by keeping my data on two flash drives (on primary, and one back up) and my notes were in a locked cabinet in my office in a secure building.

Of particular concern in this case is that I interviewed some supervisors and some employees. As part of the entry process into those conversations I used the consent form to reiterate that I would not be sharing information, transcripts, or specific feedback about individuals in the process but only provided data in aggregate.

Chapter 4: Findings

Since learning about the Socio Economic Approach to Management (SEAM) and the TFW Virus I have been interested to find out more about its presence in American organizations. For my dissertation research, I started with the research question "Do management practices of American organizations reveal and transmit the TFW Virus?"

To find out the answer to that question, I interviewed 19 individuals at Manufacturing Corp., made observations at the location, and reviewed company documents. I visited the location nearly a dozen times in the process of gaining entry to the site, conducting interviews, and following up with individuals in the company.

Manufacturing Corp. is located in a suburban area of the Pacific Northwest of the United States. The neighbors of the corporate campus are similar high tech manufacturers. Located in a quiet area where the individual corporate campuses are separated by several hundred yards, it appeared care has been taken to maintain vast green spaces. The views from the parking lot at Manufacturing Corp. were of distant mountains and trees. It was quiet lovely.

In driving to Manufacturing Corp. I observed the company is located in a relatively affluent area. The road to the company is a boulevard with trees lining the sides and green space in the center lane. There are nearby shopping complexes developed within the past decade. The mix of retailers target upper-middle class families. They included the obligatory Starbucks, a large grocery chain, yoga studios, and a satellite location of a large medical clinic.

The exterior of the manufacturing and business facilities fit in nicely here. They are well maintained, and there is little evidence from the outside that these are manufacturing facilities.

There are no large smoke stacks or heavy equipment. There is little truck traffic. There is very little to distinguish one of the companies from another, other than the signage in front of each

building or campus displaying the logo of the company and directs people toward and expansive parking lot.

Manufacturing Corp. has a convenient and easy to find visitor parking right. The number of spaces and fact that I could always find a place to park led me to believe that they regularly receive a small number of visitors. Those visitors only come for a specific purpose and do not wander in unexpected. The lobby adds to this conclusion, as there is a large desk directly past the entrance with one person behind it. Couches flank either side of the room with small end tables covered with company materials. It is comfortable, but it is not a room where it feels like one is expected to wait long. Two conference rooms with seating for four around a small table sit to either side of the entrance to the building in the lobby area.

Behind the reception desk is a non-descript door with a key card access reader next to it. That is the door to the heart of the facility, and the door where individuals come out to meet visitors. Most of my meetings took place in one of the rooms in the reception area. It was explained to me that there are several reasons for this. The first is practical. Few individuals in the company have offices and conference space is at a premium so these rooms are convenient for small group meetings. The second reasons are more related to the business. Some of the processes in the main part of the facility happen in "clean rooms." Therefore, they keep the entire environment as free of outside contamination of any kind as possible. The other reason is that there is a concern about company security, particularly as it relates to the intellectual property of manufacturing processes and products. They do not want pictures or other information about their facility to be broadcast. They want to protect against giving away a company secret that is a competitive advantage for them in a highly competitive industry. Part of

the sign in process included a confidentiality statement, and before I was given a tour, I signed a longer confidentiality document.

Both on a tour of the facility and during interviews on the night and swing shift I was in parts of the facility beyond the security barriers. The overall impression is of cleanliness and order. For instance, there is very little carpet and few walls that are not white and clean. The hallways are long, and it is like there is a building within the building. This illusion is particularly apparent in the manufacturing part of the facility, where there are several windows into the clean rooms where individuals are performing work tasks, but almost no windows to the outside.

The hallways are clear of any art. The only materials posted are directly related to the company, work rules, or processes. Most of the bulletin boards I saw highlighted elements of Lean Manufacturing, which in interviews I confirmed is a major focus at the company.

The clean rooms are particularly interesting. I was not allowed to enter any of them because of the need to keep them clean but I could observe many of the processes and workers through windows into the spaces. The clean rooms are built to make sure that the production environment is as free of contaminants as possible. The workers in the rooms wear a full covering from head to toe, with only their eyes showing behind safety glasses. One individual told me that across the industry what is worn in a clean room is referred to as a "bunny suit."

The rooms are kept at a constant temperature, and air flow is constantly pulled into the floor so that any contaminants are pulled down into the filtration system. There are many rules that go along with keeping the rooms clean. Some rules are obvious like no eating and drinking, but others are more specific like the prohibition on pens that "click" because the act of clicking a pen sends off particles that are contaminants. Jonathan, who works in the clean room

environment described the environment as "Cleaner than a hospital," and described the noisy airflow and other challenges of working in the environment. Several individuals brought up the fact that the full facial covering makes communication difficult, yet they indicated that people who work in the clean room get very good at reading eye contact and body language over time. Hannah described her ability to tell the stress level of a longtime coworker across the room simply by posture.

The bulk of the facility is used in the manufacturing process. Beyond my tour, I spent some time in the area populated by upper management, engineers and some supervisors. There are less than a dozen offices and I observed only three conference rooms. There is a large set of cubicles in the center, and this area does have several exterior windows. The offices line one wall on the outside and the cubicles are on the inside. There are no offices at the front of the building so cubicles do get direct sunlight. There is a large open space where additional cubicles could be built as production demands. This area was the only area of the building I was in that was carpeted, but it still maintained a very clean and efficient look. The conference rooms I was in were small, allowing seating for only four to five individuals. Similar to the offices I was in which were smaller, allowing a desk and chairs for two visitors, but no more. Overall, I found this area of the building comfortable, but lacking personality. Similar to the lobby which only has aerial pictures of other facilities, but not people, there is a sterile feel to the place which seems to be by design.

Interview Process

The interviews took place in three different rooms at the location. It is notable however that there were few things that distinguished each room. They were all conference rooms, almost identical in size, furnishings, and configurations. There was room for four individuals at a small

table, and in all cases I sat on one side of the table and the person I was interviewing chose the chair directly across from me. For the swing and night shifts, I interviewed individuals in the conference room located within the space where managers and supervisors have offices and desks. That is behind the security barrier. For the day shift, I interviewed individuals in one of the reception area conference rooms.

The rhythm of the interviews was the same for each shift. After getting checked in, receiving my visitor's badge and setting up in a conference room, individuals would come to my location based on a preset appointment schedule. The first two interviews each night were with the shift supervisors. Those were followed by back to back interviews with two members of their respective teams chosen through the process outlined earlier for a total of six interviews each session.

Data Analysis Process

After the interviews, I started the process of creating the transcripts and going through the interview notes. I wanted to take the time and see what occurred from the data. My first step was to assign aliases for all of the participants. I randomly ordered the data collection sheets, and used the "Most Popular Baby Names of 2001" to name each of the participants according to gender starting with the most popular name and working my way down the list. Later in the process, because it occurred to my advisor and me, I added a last initial to each of the names to signify if they were a supervisor (S.) or floor worker (F.). This helped keep at some key points where differences between supervisor and floor worker opinions occurred.

Then, after initially going through the interview notes and transcripts I began to develop a list of themes. My initial notes were lengthy, and to try and keep the data fresh I went through each shift and created a page with themes for each shift. This process was tremendously helpful,

as a few themes, I predicted would emerge coming directly out of the interviews, did not in the end have many entries under them. It was a good indication to me that the data collection was helping me sift out some of the broader information.

After I went through and categorized themes by shifts, I put the data from each shift side by side and combined the data under similar categories. This again required some sifting, as some shifts seemed to have issues particular to them, and I wanted to get a better sense of the whole. For instance, several individuals on the night shift indicated that they missed a schedule option they had in the past, but that was the only group that came up in. At one point, "work schedule" was on my list of themes but that went away as I combined themes because I found that the discussion of "work schedule" was actually tied together with some of the greater themes that worked across all of the shifts.

After looking at the themes by shift and combining them, I separated the supervisor interviews from the floor worker interviews. I went through the process again of developing themes for the supervisor group, and then the floor worker group. I compared them, and combined the themes where they seemed to overlap and noted the differences.

Finally, I went through the notes, I had made during my tours and other observations, and reviewed the documentation that I had. I looked to see where the documentation and observations supported or contradicted the themes that had emerged and added those to my notes.

When I had the key themes developed, I went back to the literature review and some of the materials on the TFW Virus to review what Conbere, Heorhiadi & Cristallini (2014) said were key manifestations of the virus. I did an initial categorization where I fit each of the themes into the virus, but I found that I was missing part of the themes. Therefore, I went back to

categorizing themes and came up with the final list below. Then, I went back to the key manifestations of the virus, and fit the themes into those categories.

Interview Results and General Observations

As expected, each interview produced a number of personal observations unique to each individual and a number of things that seemed common across the people in the organization. Even in this small group there were also divisions based on supervisors versus floor workers, shifts, and time with the company. In general, the group said that Manufacturing Corp. was a good place to work. Tension often came around communication and interpersonal issues. There were also some common ideas about the roles of management and what people expected out of their work at Manufacturing Corp.

Overall, I found the employees at Manufacturing Corp open to the questions and the interviews took the full time allotted. With very few exceptions, each person came in curious about the purpose of my study and took time initially to make sure I knew that Manufacturing Corp. was a good company and they liked their work. This did not seem to be out of fear, but rather out of a shared desire to have the company portrayed in a positive light. As people came in, they were often smiling, our interviews included some laughter, and with only one exception people offered that they were open for any follow-up questions that I had. Many individuals gave me personal email addresses or phone numbers because most do not have work email addresses and cannot take calls during their shifts.

Individual Introductions to Supervisors. The supervisory group was all male. Among the group the shortest tenure is three years with most of the group having more than ten years' experience. There was no obvious racial diversity in the group, and the range of ages placed them all in late thirties too late fifties.

Supervisors at Manufacturing Corp. supervise one of three shifts; day, swing, or nights. Within their shift, they are responsible for particular areas of the manufacturing facility. There are two supervisors per shift, and each supervisor is in charge of a team of twenty-four to twenty-six. Depending on the area, supervisors may have shift leads to help manage the work in their areas.

Michael S. was a supervisor who has been at Manufacturing Corp. for thirteen and a half years. Michael S.'s enthusiasm for the company stands out. He came from a similar company and stated "I have never regretted coming here." To almost every answer he had both positives and constructive criticism for the company. It was also clear from our talk that he truly wanted to do what was best not only for the company but for people that he worked with. One piece of evidence I picked up on was that he has taken advantage of a number of trainings and opportunities to step into leadership roles, including in the Lean Manufacturing journey. He recently had become certified in Lean and talked about a recent Kaizen event he had run.

Joshua S. was one of the most highly engaged and energizing people that I met at Manufacturing Corp. He told a story about how much he enjoyed leading Lean Manufacturing. He talked about the skepticism at first, and how floor workers walked in with a frown and walked out with a smile. He had genuine enthusiasm for what he had seen in the past five to six year. As a supervisor he seemed the most dedicated to the idea of having fun with his team, and gave several specific examples of how he made sure his people got off the manufacturing floor for teambuilding exercises.

As a supervisor, Tom S. was very serious his responsibilities as a supervisor. With over 25 years of experience in the industry he wanted to, "...make sure things move." He had worked for three different companies in the industry, but within the same basic areas of responsibility.

He felt a profound sense of responsibility as any mistakes ultimately came down to him as a supervisor.

Helping get his people the right tools to do their job was the primary responsibility of a supervisor according to Jacob S. He had the shortest tenure at Manufacturing Corp. of anyone at the supervisor level at just three years. That was significant to him in that he had two other opportunities to come to Manufacturing Corp., and now that he was there he wished he had come to Manufacturing Corp. sooner. Much of the focus of our discussion was on his belief that a full organizational commitment to Lean Manufacturing had made a significant impact compared with his other employers.

Matthew S. was the only supervisor, with whom I talked, who came to the company without previous experience in the industry. He did however come out of a manufacturing environment where they also "Wore the bunny suits," a description he used in reference to the distinctive head to toe coverings common in clean rooms. Like all of the supervisors, he worked his way up from floor worker to supervisor. Matthew S. also shared that he had more education than most of the other workers, with both an associate's and bachelor's degree.

When Nicholas S. described his supervisory shift as "graveyard" in his distinctive deep baritone, it seemed a little ominous, but throughout our conversation he talked about the many good things in the company, and how in all cases the good outweighed the bad. He never gave the example of a negative without immediately following up with a positive. While most of the supervisors had traveled a path from operator to supervisor, Nicholas S. brought a depth of outside experience that was unique among the group. He graduated from college and was immediately put into a management training program with a high tech company. Throughout his career he also spent time in technology for a large medical system. He did have manufacturing

experience specific to the kinds of processes and technologies before coming to Manufacturing Corp. but he is the only supervisor, I talked with, who had not actually spent time as a floor worker in the specific industry.

Individual Introductions to Floor Workers. Among the twelve team members I interviewed who make up the floor workers, three of them were women. In comparing this ratio of female to male employees in the interview group with the full list of employees, it appears representative of the whole as 30% of the floor workers are women. There were two individuals with observable ethnic diversity and one individual who shared during the interview that English was his second language. The age range was wider than among the supervisors. Both the youngest and the oldest individuals that I interviewed were in this group. In terms of tenure with the company, four individuals had been with Manufacturing Corp. for three to five years, six had been with the company for six to ten years, and the final two had been with no prior experience in the industry.

Jonathan F. is one of the newest floor workers at Manufacturing Corp. at just over three years. He was also one of the youngest workers that I talked with, even though he already had previous experience in the industry. Having decided to try something else for eight to nine years and then now getting back into manufacturing he said that he felt like, "A new kid on the block."

"I feel like a scientist," is how Hannah F. described her enthusiasm for the work that she does and Manufacturing Corp. She also seemed empowered that she had an impact on millions of dollars of products and equipment. Typical of many of the floor operators, Hannah F. was somewhere between 30 and 45 years old. She also was a newer employee, having only been at Manufacturing Corp. for three years.

Andrew F. has been in the industry since 1987. He described the processes that he was involved in very specifically, step by step. Of all the employees he was the most precisely focused in his answers. He has been at Manufacturing Corp. for the seven years. He described a strong desire to "work by himself." He also stated that he didn't find anything to be "proud" of in his work, but enjoyed hard work and that the job "Paid his mortgage." Further on into the interview he did open up some, laughing at some of his own answers.

One of the ethnically diverse members of the teams I spoke with, Christopher F. was also among the most experienced. After leaving college, he began working on the manufacturing floor for another company in 1980. He reported loving his job ever since. He has worked as a floor worker for Manufacturing Corp. for six years, but had previous supervisory experience and training with his other company.

"It's a hard job to explain," Joseph F. explained when asked to describe his work. He was one of the floor workers who talked extensively about the repetitive nature of the work, and that most days things did not change. On one hand Joseph F. seemed to want to project a very laid back and not caring attitude, but when asked he talked about deep feelings in terms of how he felt managers and supervisors felt about him. He was also one of the very few who talked about a previous work experience at a previous employer in the industry being more positive than his time at Manufacturing Corp.

William F. had high energy from the time he entered the room. He was eager to share information about the company and technical information he had gained over the past nine years at Manufacturing Corp. He thought that one of the misconceptions about their work that it was more high tech and that they sat at a desk. He described it more as a manufacturing job, where he

broke a sweat every day. His perception is that Manufacturing Corp. is less automated than competitors.

Anthony F. said that his job at Manufacturing Corp is "The best job I ever had," comparing his work at Manufacturing Corp. to four other competitors that he has worked for. His work history supports that conclusion as he had ten years' experience before coming to Manufacturing Corp, and has now been in the same place for the past fourteen years.

Dylan F. was one of the people who mentioned missing the weekend shift. He noted that the pay was better, he got to work fewer days, and because his wife did not work outside the home he got to spend time with her. He also noted that he had not gotten to work overtime for many months, which he missed. He was even natured in his approach to work. He described most things when asked initially as "fine," and in most cases was neither too hot nor too cold in his answers.

Another person of diversity at Manufacturing Corp. was Tyler F. He wanted to make sure upfront that I knew that have did not have anything "bad" to say about the company. With two years of college, he took a job in another field but then found his way into the field. He has been at Manufacturing Corp. for four years after six years at another company. He was very enthusiastic about team work, and talked about the power that comes from working as a team.

Kaitlyn F. is another person that mentioned the previous weekend shift and how she much she enjoyed that. She has been there the longest among the women, whom I interviewed, at more than 15 years. She felt that pay which was only at the "going rate," for the industry which was remarkable because most others felt like it was better. She noted, "I work hard for my money." She was one of the people that talked about the physical demands of the job.

Cameron F. described his overall job as "easy." He has been at the company for four years, after moving over from the restaurant industry. Before that, he had previous manufacturing experience. Because of his previous experience, he had many recommendations about what he thought management should do to improve Manufacturing Corp. but was overall reticent. It took a lot of follow up questions to get to the core of issues, and his answers tended to be short and direct.

As one of the few people to come to Manufacturing Corp. without previous industry experience Madison F. talked about the work being mundane, but better than her jobs outside the industry. She talked specifically how there were stations in her area that she enjoyed more because they required more thought and planning. She is also one of the very few individuals, with whom I talked, who had experience across shifts in her six years with the company.

Themes

According to Stake (2013), themes are the key ideas having importance related to the case. Throughout my analysis, several of these ideas kept occurring across people and across shifts, though some variation is noted below. One of the challenges in developing the themes is that at the level of espoused values (Schein, 1999) individuals expressed a great deal of satisfaction with Manufacturing Corp. However, the more time I spent working with the data, listening to interviews, and reflecting on what I had heard, I began to see patterns of underlying assumptions and beliefs that drove what was happening inside Manufacturing Corp. and inside the lives of the people working there. The themes are expressed in overarching categories, evidenced by several behaviors, and in the chart below I have added a key quote which sums up what a group of individuals reported.

Table 1

Themes and Key Quotes

Theme	Expressed by	Key Quote	
Expressed sentiment that Manufacturing Corp is a good place to work	Positive expressions about pay and benefits	"Good benefits"	
place to work	Feelings of company stability	"Layoffs are big in this industry and Manufacturing Corp. is better than most at holding onto people."	
	Positive relationships with management	"The best [supervisor] I have had in the past ten years."	
	Commitment to Lean Manufacturing	"Lean has taken hold,"	
Individual feelings of unimportance	Low expectations for role of work in life	"It pays the mortgage."	
	No chance for advancement	"You are never going to make it out of production."	
	Lack of Control	"We worked so hard yesterday and then sometimes you come in and it's like – we're testing again."	
	Boredom	"I see a lot of bored people."	
Suspicion and Lack of Trust	Communication problems		
	Interpersonal Conflict	"The biggest discouragement for me isn't projects it is the people issues."	
	Favoritism	"Management turns a blind eye."	
	Complaints of others "Work Ethic"	" watching people sit around while I'm busting my ass."	

Isolation and separation	Separation by level in organization	"Management only talks to supervisors,"
	Separation by shift	"I don't feel like the other shifts are held accountable,"
A common view of	Management as command and	"The main goal is
management	control	productivity, making sure
		people are doing their jobs."
	A common path to	"Learned under the people I
	management	worked under."

Theme 1: Expressed sentiment that Manufacturing Corp. is a good place to work

All of the individuals I interviewed spoke highly of the company in general terms when we started to talk, with some individuals sounding like they were actively recruiting for the company. Not one person expressed any desire to leave Manufacturing Corp. or that they were actively looking for other work. Pay and benefits, stability, positive relationships with managements and a commitment to Lean Manufacturing were all noted as being reasons to work at Manufacturing Corp.

Pay and benefits. The pay and benefits as reported by workers at Manufacturing Corp. are better than average, and only one individual stated feeling they were only about average. Both Nicholas S. at the supervisor level and Dylan F., a floor worker mentioned the benefits, particularly profit sharing. My interviews took place very near when checks were to be distributed for profit sharing, and Nicholas S. noted that Manufacturing Corp was one of the very few places where everyone in the company was eligible; noting that many companies he knew of had gone to systems where only members of upper management were eligible. Dylan F.also spoke about the low cost of medical benefits. It was interesting that he could not even remember

the amount of the family plan he was on because he felt the cost was so low, estimating it to be, "around \$18.00 a paycheck."

Stability. The stability of the company was a primary reason people said that they appreciated work at Manufacturing Corp. Four individuals specifically mentioned previous experience with being laid off, and several others talked about being at companies that had layoffs. William F. reported that he felt that Manufacturing Corp. did a particularly good job in holding onto people as long as possible and not laying individuals off. Michael S. agreed, "Layoffs are big in this industry and Manufacturing Corp. is better than most at holding onto people." Both those that had been laid off and the survivors noted it was a profound experience and shaped the way they thought about work. They reported simply being happy they had a job that was stable having come out of that situation. Because so many people at Manufacturing Corp. had previous industry experience, and had seen layoffs at competitor companies the possibilities of layoffs were on their mind.

Positive management relationships. The past five years have been good times at Manufacturing Corp. and those interviewed gave credit for this to upper management and their commitment to the Lean Manufacturing process. There was a significant leadership change during that period, and the new team was credited for bringing implementing Lean manufacturing principles and sticking to them over the past five years.

Joshua S., a supervisor with some of the longest experience said that the focus under the prior leader was just to get product out the door on a daily basis with little or no regard to the long term sustainability of the effort, quality, or the effects that might happen if customers received faulty products. Other employees noted a similar change in the last 3-5 years.

Documents supported measurable positive results both in terms of production and profit.

Individual supervisors were called out for special attention to the positive change over the past 3-5 years. The senior manager whom I interviewed was mentioned by several people for his leadership. Hannah F. called her supervisor, "The best I have had in the past ten years," reaching back to a previous company for comparison.

The commitment to and implementation of Lean Manufacturing. The company has been on what they described as the "Lean journey" for the past five years implementing Lean approaches, and holding the requisite events to become a Lean manufacturing facility. The results of these efforts on production have been very impressive over the past five years, with the company showing significant improvement in every statistical category that they measure. The pride in these efforts was described to me by one member of the organization, the pride in these efforts was described to me by one member of the organization "We used to be the low performer in the company, now other facilities are copying what we are doing."

Every person, whom I interviewed, talked about some connection with the Lean Manufacturing efforts taking place at the company. The supervisors as a group were the most positive about the effects of Lean. All gave positive credit to the efforts effect on the workplace. Michael S. was the only supervisor who expressed any skepticism about Lean but he reported being long past that as he had seen it work to reduce the amount of work in his area and increase productivity. His initial skepticism was based on his experience at another company where he said, "Lean failed miserably," because of an ongoing lack of company support. Several individuals reported similar experiences at the operator level, but all of those who had previously experienced Lean failures at other companies stated that at Manufacturing Corp. Lean had truly taken hold.

At the floor worker level, those who had been involved in specific Lean projects indicated the highest levels of satisfaction. Currently, two types of events are occurring on the Lean journey that almost every individual mentioned in one way or another. One is a "Kanban" and the other is a "Kaizen Event". In chapter five I will discuss more specifically the details of these events and there overall effect in the organization. What came out during the interviews, was that these events were cited by six individuals as the times when they felt most energized and engaged in their work specifically and indirectly by four others. One person stated, "We came up with the system" and expressed pride that what they had come up with was picked up by another facility in the company. Another person expressed that they enjoyed the teamwork of a Kaizen event, because they got to work with a variety people to solve the problem.

Cameron F. talked about how he felt encouraged that "Lean has taken hold," in the past three years in the company and said that had increased his job satisfaction and led to a much more positive workplace than his previous employer. He spoke about a specific Kaizen Event that was meaningful to him where at the end of it he felt the group had "Complete buy in," to dealing both with the problem and the Lean Manufacturing process.

Part of the Lean Manufacturing journey was working on "5S projects." One supervisor stated, "5S was great. I could make changes in the areas I was hired for." The ability to affect their work was clearly energizing to the people at Manufacturing Corp. The enthusiasm for the Lean journey was also apparent in Andrew F., who was one of the most critical of the company as a whole, but saw many benefits of 5S and noted a long list of benefits. Others that had not been able to participate in these types of events clearly felt slighted. This came up as an issue between shifts as it was perceived that the day shift had more opportunity to participate in Lean events.

Beyond people feeling slighted for not being included in Lean events, some others expressed different concerns with Lean Manufacturing as implemented. Mathew S. described the system as being 50% positive and 50% unnecessary. He mentioned that some of the projects that took place under the 5S heading seemed micromanaged. As an example he talked about squares that were placed on the floor to indicate the proper place a trashcan should go. Anthony F. stated of Lean, "You better support it," indicating that overall he was pleased with what had come out of the events, but that some individuals had, "Gone overboard" in implementation. What is worth noting here and will be discussed further in chapter five is that people expressed a great deal of energy when they were involved in changing and designing the system.

Theme 2: Individual feelings of unimportance

Despite the positive expressions about Manufacturing Corp. as a workplace, most employees expressed that they felt individually unimportant in the overall organization. This was most acute among the floor workers. Overall, employees at Manufacturing Corp. expressed low expectations for the role of work in life, which stemmed partly from feelings of a lack of control, little chance for advancement and boredom in the day to day tasks at work.

Low expectations for role of work in life. While people expressed that Manufacturing Corp. was a good place to work, the underlying feeling for why individuals are at Manufacturing Corp. was summed up best in what Andrew F. said, "It pays the mortgage." When asked about his work at Manufacturing Corp. Tom S., stated, "Some days you want to go to work, and some days you don't." This seemed to echo the mindset of many that they did not expect the job to be central to their lives or who they were as people. They were simply working in order to meet their material needs and by all accounts Manufacturing Corp. was viewed as providing for those needs better than most companies.

When asked about a time when they were highly engaged at work two of the twelve floor workers interviewed could not come up with a time, and also did not seem to place any value on the importance of that. They stated simply that they did their job, received a paycheck and that was all that was expected. While these two were at the furthest extreme, most of the floor workers reported that they did not feel it was the kind of job where they should be engaged the majority of the time.

Joseph F. told a story about a time he had previously been highly engaged in work. To follow up I asked, "What keeps you feeling that way all the time?" He responded, "Caring too much," and added, "The general vibe is you're dumb, know your place and don't think." He connected the positive experience of being highly engaged in a Kaizen event two years ago with the negative lesson that it was actually better to not be too engaged because then he would not be disappointed. Joseph F. did not indicate that he felt that Manufacturing Corp. had any responsibility to keep him engaged; rather he had come to believe that disengaged was a key to personal survival at Manufacturing Corp.

Dylan F. was one of the people who expressed that he felt Manufacturing Corp. was a good place to work, noting both the positive salary and benefits. He was also positive about his relationship with his manager. When asked about a time he felt discouraged at work he stated, "I'm not discouraged, work is fine, the people are fine." He went on to say, "They pay me so I do it." He rejected the idea of being engaged in his work, just talked about completing his tasks. Similar to Joseph F.'s answer he said, "I try not to pay attention," in reference to how he felt not being engaged was a key to his day to day happiness. Joseph F. and Dylan F. both indicated that Manufacturing Corp. was a good place to work but had little or no expectations in terms of what that work should provide them other than financial stability.

In answer to the question about how they described their work to friends and family, most had very vague answers that seemed designed to shut communication down rather than provide an opening for further talk about their work. Individuals frequently talked about the fact that the product they made was difficult to explain, and that they really preferred not to explain or to talk about work. When asked how they described work to friends and family several focused on the fact that it was a "good company" because of the pay and benefits.

A lack of formal education or experience outside of the industry, particularly in the floor workers seemed to be a contributing factor to why people felt they were at Manufacturing Corp., and seemed to be happy they were there because they felt like they had few other options. When asked to describe how he would explain his job to friends or family, Andrew F. stated that it was a good job for someone who didn't want to go to college or go back to school because of the pay and stability. However, he did state that he was talking specifically about Manufacturing Corp. because, "The rest of the industry is sweatshops." Christopher F. also talked about the lack of formal education, as he indicated that he thought he would stay at Manufacturing Corp. for the rest of his career because he felt he did not want to go back to school at this stage in his life.

No chance for advancement. Part of the lack of engagement, particularly among floor workers comes from a lack of perceived opportunities for advancement. "There is no chance for advancement," John responded to the question about what he found discouraging, "You are never going to make it out of production." He described his job as mundane and easy. He said that he found performance reviews particularly discouraging because in his reporting they are "20% attendance and 80% what your manager thinks of you." Again, he linked this back to favoritism. Madison F. was another floor worker who spoke about the feeling that she would

never have an opportunity to advance simply because of the numbers game and the lack of opportunities.

Christopher F. stated a similar feeling of not having an opportunity for advancement "I don't think I could go higher and I don't think I really want to."

Lack of Control. On a day to day basis floor workers and supervisors shared that they experienced a lack of control over their work, or that decisions were made about their work in ways they did not understand or have access to. It is worth noting that there were clear exceptions and instances where people expressed they had control, particularly at the supervisory level. Supervisors and upper management were cited by two supervisors for being particularly open to discussion and feedback. However, that leaves the majority of both supervisors and floor workers feeling like they had little control over their workplace.

Feelings about the lack of control came out strongly in the discussion of a new card system. Very early in the interview process people began to mention a new clocking in and out system for taking breaks. This system was going to replace the previous system which was simply an honor system. The new system was not in place, but the organizational grapevine had led individuals to believe that they would need to swipe their badges in and out of break times. When talking about this, Hannah F. stated that she did not want to have to change her behavior because management was not holding others accountable. Another individual stated that he saw the problem happening with other people, but clearly did not like this solution. Four individuals noted an instance where they felt the new badging in and out system would rob them of the flexibility they needed sometimes in taking breaks and that the system would lead to both a less efficient workplace and a less hospitable one. Madison F. was perhaps the most critical of the system, saying that she sometimes liked to come in early or stay late in order to get more

communication about what had happened in the previous shift or to give information. She felt like implementing this system would lead to more breakdowns in communication. Cameron F. on the other hand was for the system, but because he felt that it would help to hold others accountable, and not have an effect on him.

Kaitlyn F. summed up some of the challenges in the statement, "We worked so hard yesterday and then sometimes you come in and it's like – we're testing again." She also spoke about how showing up and not getting to work on the projects that you want has been positive for the company because it is more efficient, but she clearly misses being able to make decisions.

Boredom. Low engagement flowed from boring or repetitive work. Cameron F. said of his work, "It's a no brainer." Even among those that felt the most engaged it did not seem to be because of the tasks they were doing. Hannah F. stated, "I like to think I am engaged every day" and "I choose my attitude." She talked about enjoying the detail of the work, and knowing that she was responsible for processes that if not done correctly could lead to million dollar mistakes. However, she ended answering the question about being engaged at work with saying that the main reason she thought she felt this way was that she was not a "lifer". While not talking about a specific exit point from the company, she was one of the individuals with less tenure and clearly did not see herself in the same position a decade down the road.

The work as described by the floor workers is repetitive and as Jonathan F. stated, "I see a lot of bored people." Joseph F. indicated that one of the discouraging factors in his work was the inability to change it and that it is largely the same thing every day. When explaining the job Michael S. explained, "It is just manufacturing, pressing buttons and that kind of stuff."

Theme 3: Suspicion and Mistrust

Individuals at Manufacturing Corp. expressed strong feelings that they as individuals were doing the right things and working hard, and in most cases felt that was true on their shifts or among the groups closest to them. However, once they began talking there often seemed to be a group of "others" who did not share those same values or perform to the same level. This most often manifested itself when talking about communication problems, interpersonal conflict, favoritism, and the subject of other's work ethic.

Communication problems. Communication seemed to be a consistent challenge at Manufacturing Corp, and those were related to physical limitations, lack of personal communication technology, and divisions across the workplace. Some of the physical limitations are discussed above and were observed on the tours but it was interesting to have those interviewed help put these into context.

Even though Jonathan F. described the facility as "Cleaner than a hospital," he did note that the air flow systems and machinery made it a very noisy environment to work in. A number of people mentioned the clean room suits as being impediments to communication. Nicholas S. talked about the physical chaos of the environment as there are many moving parts, and the entire goal of the enterprise is to move things through a long process. One of the misperceptions that Tyler F. talked about was that this is a high tech job where a person sits at a computer. He said that he thinks of it more as a manufacturing job and because of the constant movement communication is difficult.

Another possible physical limitation to communication is a lack of technology. Madison talked about communication as being like the "telephone game" because news is often passed person to person rather than through technology in a written format. Particularly among the floor

workers, most reported that they did not have access to email, and felt that better mass communication might improve their understanding of messages from management or across shifts. As stated above, when asked if I could follow up with them almost all of the floor workers offered personal email addresses, as they did not have work email addresses.

When asked to pinpoint where communication broke down it was often attributed to communication across shifts, across work levels, or across departments within the manufacturing facility. Madison F. spoke particularly of the challenges of passing off information from one shift to the next. This did seem more acute at the floor worker level, as they noted that the pressure to get out of the shift on time sometimes led to incomplete information being passed down from shift to shift. Additionally the floor workers reported the most trouble in passing information from management to floor workers. Three of the floor workers reported that they felt communication particularly broke down when they as people on the manufacturing floor tried to communication issues to supervisors and upper management. Kaitlyn F. told a particular story where she felt like there a very high cost to the company, because as a floor worker she was unable to communicate a concern to management and engineering. In the end, she was correct that there was a problem, but she indicated it took months for that communication to get through the right channels.

Interpersonal conflicts. Overall, employees at Manufacturing Corp. reported interpersonal conflicts which often stemmed from a lack of trust that other individuals in the company were working as hard as they were and toward the same goals. Four of the six supervisors reported that interpersonal problems were their least favorite and most challenging parts of their jobs including Tom S. who stated, "The biggest discouragement for me isn't projects, it is the people issues." Among the floor workers, ten mentioned interpersonal conflicts

and brought up the subject of work ethic as factors having a negative impact on their job satisfaction or productivity.

Michael S. mentioned that interpersonal problems were some of the main things he had to deal with as a manager, speaking specifically of the challenge of dealing with gossip. As a supervisor Tom S. noted that people issues were the hardest, and talked candidly about his own struggles coming up with the right formula to help individuals through interpersonal conflicts. He talked about trying the strategy of talking to two people at the same time, or talking with the individuals involved one on one, and noted sadly, "But I don't think I have the answer." What is clear is that this work takes a good deal of time and energy from most of the supervisors.

As a floor worker, Anthony F. explained that his main source of discouragement was interpersonal conflict, but added that he felt this was inevitable any time you are working with people. One of the interesting keys that came up in terms of interpersonal conflict is that people seemed to equate socializing or talking with interpersonal problems. One individual manager indicated that people who talked were the problem, people who in his words "liked to work," rarely had interpersonal conflicts.

Favoritism. Among the floor workers, more than half expressed that they felt like managers had favorites and those favorites were allowed special privileges or more commonly were not held accountable to the same level of production or strictly within company rules. When describing the worst kind of supervisors Dylan F. indicated those that play favorites, but followed it up with, "But I am a favorite" indicating with a gesture that this was alright with him. On the other hand Madison expressed that she felt she clearly was not a favorite.

Mathew S. indicated that favoritism comes out in getting time off which he described as competitive. He also said that some managers were more forgiving with sick time. He described

that some managers required a doctor's note when sick, while others did not. Not only did he indicate this was related to favoritism, but he indicated that he felt this level of supervision was unnecessarily parental.

Jonathan F. noted that there is definitely favoritism and noted that in her industry experience she sees more people problems at Manufacturing Corp. She said that a lack of teamwork was the main thing that caused her discouragement at work. The word "favoritism" was used by individuals most often in answering what was discouraging about work. Andrew F. said, "Management turns a blind eye," when discussing his discouragement with favoritism.

Complaints of others' work ethic. Four of the floor workers expressed that they were doing excellent work and had a good work ethic, but they were unsure if others did. Among the supervisors, all six spoke in some way about having some productive workers, and some who were unproductive. Two supervisors brought up an interesting term that I suspect is known outside of the company and used within Manufacturing Corp. is clearly derogatory. "Cave" people refers to, "Citizens Against Virtually Everything." It was clear in how two of the supervisors talked about working around cave people and that it was detrimental to a career and the feedback or input of those people should not be trusted

When Jonathan F. spoke about teamwork, it was from a position of distrust. For him, teamwork was not a key to make him more productive, it was because he felt sometimes he had to answer for other people's mistakes. Hannah F. stated a similar concern, indicating that she did not feel that others were being held accountable. Chris F. noted that people's work ethic is not the same, and that others lack of work ethic was something that led him to feel discouraged at work.

Andrew F. was particularly vocal about the subject of others work ethic, stating clearly that he had a good work ethic but he followed it up with a story about what he felt the direction was of the new workers just coming into the plant. He was particularly concerned about, "... watching other people sit around while I'm busting my ass." Individual tasks have job instruction breakdowns and Andrew F. explained those sheets are one of the very first things that someone gets trained on when they begin working in a new area or are newly hired. Andrew F. expressed that not everyone takes to these job instruction breakdowns. He stated that he showed a large group of new hires how to do it several years but they seemed to respond with, "Who are you to tell me how to do this?" He indicated then that he felt the new generation of workers was not well equipped to come into the facility and be productive but rather wanted to spend their time socializing.

Matthew S. told the story of getting to lead his first Kaizen event recently. He expressed that he really enjoyed it and during the process he was highly engaged. When in a followed up question I asked how it went he said not as well as he would have liked. The key reason he offered is that the team was picked for him, and in his opinion it was a not a strong team. He complained that as the leader, he felt like he had to do most of the work because of the weakness of the team. Next time, he said he was looking forward to picking his own team, again indicating he was looking for a "work ethic" that was not apparent in all of the floor workers and supervisors.

Theme 4: Isolation and Separation

People reported isolation and separation from others at Manufacturing Corp. There are the walls, windows, clean room suits, and other factors that make up physical isolation. Part of it is also that it is a very large facility populated by few workers per square foot. Separation

between shifts occurs and people do not often move from shift to shift meaning this separation is often long term. Discussed above the clean room environment requires a dress code that provides an additional level of isolation. At the floor worker level observation and the interviews also indicate that individual jobs are very distinct. People do not move from one part of the process to another, and each job is made up of a set of tasks and then the product is moved on along the line to the next person who completes tasks. The majority of a floor worker's shift is engaged with the product, only interacting with other people in the plant when handing off the product to the next step or if something had gone wrong.

As I listened, I began to think of a metaphor for what participants in the interviews were describing when they talked about teamwork. I came to think of it much more as a relay race rather than a team sport like basketball. The focus is on running the individuals portion of the race and ensuring a smooth handoff. The individual is on the track alone, and once they hand off the baton they only see the end result. When things go well there is a medal at the end in the form of profit sharing, and when things do not go well an individual can still feel good about their "leg" of the race and point to the other legs of the race of possible problems.

Separation in the hierarchy. There is a clear sense of the hierarchy at Manufacturing Corp., and from the initial moments of my interviews it was clear that some people felt tension about their place in the organization. In my questions I did not use the word "management" in regards to the levels in the organization. However, when talking about the organization almost every individual used that term to describe the people in leadership. It had a very strong connotation, and seemed to have a meaning far greater than just a place on the organizational chart. For instance, management as a whole, without any names attached was given credit for a number of actions and motivations throughout the plant. One person expressed "Management is

only concerned with cost cutting." Andrew F. expressed, "Management doesn't like confrontation." There were no names attached to these statements and very rarely were there specific incidents that came out in follow up questions, but the idea that there was a privileged class of "management" was clear even though it was not clear at what point one becomes "management" in the minds of each individual. For instance, the floor supervisors seemed to indicate that privileged class was above them, but the floor workers seemed to indicate the supervisors were part of the "management" class.

Among the supervisors part of their tension seemed to come from the need to distinguish and separate themselves from the floor workers, and thus to gain the attention and approval of the managers above them. Mathew S., a supervisor expressed that he felt the need to separate from the floor workers because of his position even though he had previously been on the manufacturing floor and described the workers, ". . .like family because we have been here for so long."

Floor workers also reported, "Management only talks to supervisors," Andrew F. said. Christopher F. indicated a split between operators and upper management as well. Joseph F. identified feeling as though upper management did not get important information from floor workers.

An area of particular tension between the levels of the organization emerged around the implementation of the Lean implementation. All six interviewed supervisors reported events related to the Lean journey when asked about a time they were highly engaged at work. What seemed to be a key for the supervisors was the ability to talk about the way that work got done and have some effect on changing the company. They also noted they felt pleased by the results.

Only four of the twelve floor workers specifically mentioned Lean journey experiences as a positive, but others mentioned that they were disappointed that they had not had the opportunity to be part of these events. The four individuals who had participated in Lean events were the most positive about Lean.

Separation across shifts. One of the most common problems noted in the organization was communication and these communication problems were always indicated to be across some barrier in the organization whether it was shift to shift or through the chain of command.

"I don't feel like the other shifts are held accountable," Hannah F. said. Some floor workers felt as though the day shift was more privileged in terms of the opportunities that they received. Cameron F. said, "Day and swing get more opportunities, [as a night shift worker] You don't know the people upstairs." Others noted that they felt it was a disadvantage they did not have the same access to those at the top of the organization, and there was clearly an idea that proximity to those of a higher rank was preferable.

Communication problems not only persisted between shifts, there seem to also be problems among departments within the manufacturing facility. In this particular facility, that separation is somewhat reflective of the physical space as noted above. When walking through the facility, I could see the physical separation between clean room areas and other parts of the facility was just one physical element of this separation. I could see the building was also physically separated by a kind of ring configuration of room. There was an outer hallway where most people could walk, an inner hallway separated by walls with large windows that can be accessed to fix equipment inside those inner hallways, and then the actual room where the work occurs. It is possible to have three individuals standing no more than several feet from each

other, yet not being able to communicate at all across the space because they are separated by walls and windows.

Michael S. stated that he was seeing what he felt were increasing barriers between engineering and management that were related to the Lean Manufacturing processes being put in place. Other individuals spoke about differences and barriers to communication across one functional area to the next, and when those on the work floor were asked they always identified themselves with the particular area where they worked. For instance, when asked, "Tell me about your work at Manufacturing Corp.?" every floor worker identified themselves by the part of the plant that they worked in and the part of the process they were working on. Among those I interviewed only a few had ever moved from one part of the process to another.

Theme 5: A Common View of Management

One of the key ideas that came out throughout the interviews was a shared organizational view of management categorized by command and control. Both the supervisors and floor workers indicated that the job of the manager was to control what happened. Nicholas S. summed up the view of supervisors overall by stating, "People want to be led, they want their problems solved." How people came to their ideas in management seemed to be consistently from what had come before them, and what they saw happening at Manufacturing Corp.

Management as command and control. The supervisors expressed the role of management as control most often. Michael S. stated that his job was to "Make sure priorities were followed." Two supervisors mentioned that discipline was a key part of their jobs, and Jacob S. spoke of managing the flow of resources.

To be clear, I heard no evil intent in the managers and in fact heard many things that led me to believe this is a good group of managers who truly care about the people they supervise. Jacob S. talked about how his job was to "Ensure people had the right tools." Joshua S. and Tom S. both talked about how they like to work with employees who are having trouble one on one, and other talked about holding pizza parties, doing special training, and otherwise caring for employees beyond just the work.

However, the dominant theme among the supervisors was that at the end of the day they felt responsible to be in control of their parts of the manufacturing facility and their workers in order to meet production goals. Tom S. said, "The main goal is productivity, making sure people are doing their jobs," he added, "I am responsible for the mistakes." He clearly felt like production problems came back on him as the supervisor, a common sentiment among the supervisors. Joshua S. talked about the need to constantly find new motivational tools, and talked about the challenges particular to motivating long term employees. He was always trying to motivate employees because he felt it was his job to get total involvement from the people that worked for him.

The floor workers had a common view of management. They expressed supervisors were in the facility to make sure that individual workers were held accountable and directed. However, most workers expressed that they did not need to be supervised. This came out in floor workers suggestions of how to fix problems in the facility floor workers. For instance, Andrew F. stated that he "Didn't need someone standing over me," and that micromanagement was discouraging to him personally. He wanted to be trusted and left to do his work. However, later in the interview when talking about some of the problems he saw in management he thought that supervisors should be walking the aisle more to make sure that others were doing their work.

Joseph F. stated a similar point of view that was inconsistent. He expressed the desire to be left along on the manufacturing floor, but also expressed that he wanted more supervisor interaction

because performance reviews were too subjective and the managers did not know people well enough.

One of the most telling stories about the floor worker view of management came from Cameron F. when talking about a person who was not their current supervisor, but was lauded for being a particularly good supervisor. "All his people are under control," he said admiringly, when talking about the fact that he wished he could get back to working for this individual.

A common path to management. As stated above, only one supervisor came to Manufacturing Corp. without previous experience as a floor worker, and all of the others were hired in at a level other than supervisor and moved up into the supervisory role.

When supervisors were asked how they learned to be a supervisor there was a strong lineage to the supervisors that they had worked for. One supervisor explained that they had learned from, "A lot of observing." Another took a moment to reflect about the question when asked and stated that he guessed he had not thought about it. When he went on he stated that he "Learned under the people I worked under." Every supervisor except for one had spent time on the production floor as a worker at either Manufacturing Corp. or another company prior to their current position. This is consistent with a lack of diversity in terms of opinions about management, as they expressed that most had gotten their ideas from previous managers, in the current industry, often times in the very same facility.

Connecting themes and evidence of the TFW virus

The TFW virus is ideological. As stated earlier, an ideology is a system of beliefs, values and practices that reflect what is happening inside the organization. In the themes I could observe the practices and I heard about the beliefs and values. However, the real question for the study is where did this ideology come from and indicate the presence of the TFW virus?

When I was an undergraduate student I was shocked on the first day of class when my professor in a special seminar on the biology of HIV and AIDS started the class with the statement that AIDS did not kill people. She was not denying the devastating impact the virus was having in the early 1990's rather she was trying to teach us our first lesson about the actual biology of the AIDS virus. The presence of the AIDS virus was a cause of illness, but it was not in itself a killer. She explained that in the era before blood tests, it was only through the terrible symptoms that the infection became known.

The analogy of a virus works well to explain the next phase of the study because the themes show evidence or symptoms of the virus. I had to look at the themes and compare that to the evidence of the virus to see if a causal connection could be made.

After I developed the themes above, I went back and looked back to the literature review and materials on the TFW Virus to review Cristallini's (2011) original work on the virus, and ongoing work of Conbere, Heorhiadi and Cristallini (2014) who were writing on the virus at the time I was working on my dissertation. They noted the virus is evident in:

- Depersonalization and Submission
- An aristocratic view of the organization
- Apathy
- Separation

This was not a linear process, as once I had looked at how the themes fit with this evidence I went back and reviewed the themes to make sure I was not artificially assigning them as evidence of the virus. It was not until a second and third round of theme exploration that I sat down to look at what I had originally noted as evidence of the virus. After exploring the themes,

reading and re-reading the interviews and looking at documents I was able to make the connections between themes and virus.

The largest challenge in categorizing this data is that there is not a straight line between the themes and the evidence of the virus. This is partly because one theme might actually indicate the virus in more than one way. For instance, under the theme of suspicion and lack of trust I found indications of three of the symptoms of the virus. At the core of the theme is that people feel suspicious and a lack of trust, but that presents itself through the virus as being due to an aristocratic view of the organization, separations, and apathy or little hope for the future. Further, the ideas of depersonalization and submission are so core to the virus that it seemed like many of the themes could have fit that category.

Another challenge at this point in the process was making sure that I understood the translations from the original documents which were in the French language. For instance, Cristallini's (2012) translation uses the term "massification" which is not found in standard English. However, in reviewing and reading further this concept became much clearer, as it explained the depth of the depersonalization that is exhibited in organizations where the TFW Virus is present.

Going back to the research question, "Do management practices of American organizations reveal and transmit the TFW Virus?" the themes gave me an understanding of how people experience the work place. Because the virus is a metaphor for a set of beliefs and values underlying the behaviors, the next step of matching up the themes with the possible evidence of the virus was needed to answer the research question. It is the relationship between the themes and the evidence of the virus that is of primary importance to the research question. As I worked

through this part of the analysis I asked myself, "In what people are saying, are they expressing things that could be explained by the presence of the TFW virus?" See the table below

Table 2

Connecting the Themes and the TFW Virus

Theme	Expressed by	Key Quote	As evidence of the TFW Virus
Expressed sentiment that Manufacturing Corp is a good place to	Positive expressions about pay and benefits	"Good benefits"	
work	Feelings of company stability	"Layoffs are big in this industry and Manufacturing Corp. is better than most at holding onto people."	Apathy
	Positive relationships with management	"The best [supervisor] I have had in the past ten years."	
	Commitment to Lean Manufacturing	"Lean has taken hold,"	
Individual feelings of unimportance	Low expectations for role of work in life	"It pays the mortgage."	Apathy
	No chance for advancement	"You are never going to make it out of	
	Lack of Control	production."	Depersonalization and Submission
	Boredom	"I see a lot of bored people."	
Suspicion and Lack of Trust	Interpersonal Conflict	"The biggest discouragement for me isn't projects it is the people issues."	Separations
	Favoritism	"Management turns a blind eye."	Apathy

	Complaints of others "Work Ethic"	" watching people sit around while I'm	Aristocratic Approaches
		busting my ass."	11
Isolation and separation	Separation by level in organization	"Management only talks to supervisors,"	Aristocratic Approaches
	Separation by shift	"I don't feel like the other shifts are held accountable,"	Separations
A common view of	Management as		Aristocratic
management	command and control		Approaches and
			Depersonalization
	A common path to		and Submission
	management		Depersonalization and Submission

Depersonalization and Submission. Evidence of depersonalization and submission is not hard to find at Manufacturing Corp. because in many ways one of the unstated goals of the organization is to make processes as repeatable and as simple as possible, with each person doing the same thing the exact same way. Depersonalization and submission are also connected to the themes of individual feelings of unimportance and a common view of management. Though no one spoke about these in the interviews there are also several physical manifestations of depersonalization.

Though it may seem minor, the nature of the shift work is depersonalizing. For instance, three workers spoke of a shift that they had previously worked over the weekend. They missed that shift. There did not seem to be discussion or options and even though the previous shift worked better for them because they felt they could better manage their personal lives, when the shift was moved over they were simply reassigned. Another small physical signal of depersonalization is in the dress code of workers in the "clean rooms." While clearly important

for the manufacturing process, it is hard to tell one worker in a clean suit from another, even little things like gender or age.

Lean manufacturing and the 5S process has represented a lack of control and led evidence of depersonalization. Many individuals expressed high levels of engagement during Lean events. However, what they talked about most was how engaging it was to be part of the process where they changed something. Tom S. expressed his joy, "We came up with the system." He explained that not only did his facility benefit, but a sister system benefitted as well as they adopted the same system. While the goal is to continuously improve in Lean management, the goals are also standardization, and that does not get the same level of support from workers. Mathew S. described the system as being 50% positive and 50% unnecessary. He mentioned that some of the projects that took place under the 5S heading seemed micromanaged. As an example he talked about squares that were placed on the floor to indicate the proper place a trashcan should go. Anthony F. stated of Lean, "You better support it," indicating that overall he was pleased with what had come out of the events, but that some individuals had, "Gone overboard" in implementation.

Submission seems to also be clear, as one of the first things that happen in the training process is that one gets introduced to the "job instruction sheets." Andrew F. described training in a group of new hires on these sheets and his discouragement that they did not seem to follow the exact steps at the end of the training period. Again, there are business reasons at Manufacturing Corp. for this, but there is also a depersonalizing element as well. The job a new person may learn during the training process may only change a few times over a ten or twenty year career.

Depersonalization was not only related to the Lean manufacturing at Manufacturing Corp. When interviewing both floor supervisors and floor workers about their views about the role of management there was evidence of the cold technocratic approach of rule-making and enforcement that Cristallini indicated existed as an element of depersonalization. "Making sure people are doing their jobs," was the primary role of a supervisor according to one supervisor interviewed. Others echoed that, stating that they were largely concerned with the numbers and production.

An aristocratic view of the organization. The aristocratic view of the organization means that within the organization there is a chosen or privileged group within the organization and a class that is not part of the privileged class. According to Conbere, Cristallini & Heorhiadi (2014) this is particularly seen in the view that some individuals are superior over others which results in those in power creating rules, regulations and separating task in such a way to maintain the privilege of those perceived to be superior.

The aristocratic view of the organization came out strongly when individuals talked about their view of management. Both in the difficulty that people expressed moving into management, and the way that they talked about the role of management it was clear that there was a separation between management and floor workers and part of that separation was based on rank. Simply put, one position is higher than the other and is perceived to have special privileges. People also had an aristocratic view of shifts, noting that some shifts were favorable because those shifts overlapped with management, and that proximity to the top people led to more benefits. The privilege in this case is that the day shift workers received more recognition and had a chance to work on projects would benefit their careers. The day shift was perceived as chosen, the night shift was not.

One of the floor supervisors, Mathew S., expressed concern with an increasing number of meetings stating that some in management felt the need to "Meet with their subjects." While I have no indication the comment was meant in a derogatory manner, the language seems to indicate at least an underlying mindset. Andrew F. described a similar feeling for hierarchy when criticizing supervisors for not engaging with operators. His perception was that supervisors feel that operators are "beneath" them. He added, "My boss has been here for a year and I have talked to him less than five times."

Apathy. Apathy is a lack of interest in work. Apathy seemed to come through most clearly under the theme of individual feelings of unimportance, but it can also be found in the theme of suspicion and mistrust. It can also be found in individuals' expressed sentiments that Manufacturing Corp is a good place to work. While this sentiment is positive, from the standpoint of the virus I got the sense that part of what is meant is that this is as good as particular workers think they could hope for.

Evidence of apathy and a lack of hope in the organization comes through in the low level of expectations that individuals have in the role of work in their lives. I am haunted by how well the statement, "It pays the mortgage," seems to sum up the expectations of work. Work was not seen as a source of energy, but rather as simply transactional with workers expecting only financial compensation for the time they spent in the manufacturing facility.

A lack of hope can clearly be found in the feeling that there is no room for advancement at the floor worker level. Workers at Manufacturing Corp. have on average been there a long time, and most clearly saw themselves in those same places for several years to come. In talking about interpersonal issues, people also expressed apathy in that they just did not have hope that

they would get better. They simply felt that they were stuck with whatever interpersonal issues or conflicts they had.

The lack of hope is also seen in that workers reported both being bored and that they intentionally disengage or try not to pay attention because they find engaging frustrating. The expectation seems to be where the virus shows up. Dylan F. stated, "You can't have a perfect job or a perfect company, but here is close." While this is indeed high praise, he also stated that he tried not to pay attention because it was discouraging to be too aware of what was happening.

Separations. Evidence of separations at work is found in the building of borders, walls and fences and divisions where people interface either with other people or with technology. Separations are not hard to find in the themes and show up in the themes suspicion and lack of trust and isolation and separation. Separations can most acutely be seen between shifts, where individuals spoke of a competitiveness and communication challenges across shifts. Separations are also related to the aristocratic view, as people also expressed that there were separations based on rank in the company. Separations occur even within shifts as each part of the manufacturing process identifies with itself not in relation to the others.

Conclusion

In writing this chapter I found the more time I spent with the data, the more the major themes began to emerge and the more I found myself thinking about evidence that indicated the TFW Virus. In a way, it felt like a cycle of going from the data, to themes, to the virus and then back to the data to ensure consistency. The reason this cycle emerged is because of the strong overlap between themes. Each of the themes had interconnecting elements, suggesting a way of thinking not just individual phenomena in the overall organization.

Chapter 5

Reading in preparation for my first doctoral class I came across the quote that would ultimately lead me to this dissertation, "I keep reminding myself as I pant to keep up with change in a new era, is not to diagnose and heal sickness, but to help people find dignity, meaning, and community in work" (Weisbord, 2004, p. 262). I knew that was what I wanted to do with my work in Organization Development (OD), but far too often as I thought about my past experiences and learned more about what was happening in contemporary organization I found that for many individuals work was lacking those very elements. Because people live their lives in organizations another Weisbord (2004) concept resonated with me in that he advocated that to be effective in the work of OD we have to work on both our organizations and ourselves.

The promise of SEAM is consistent with the vision of restoring dignity, meaning, and community to work. What sets it apart is a dual focus on economic, and social performance (Savall & Zardet, 2008). The practical way that this plays out is in the focus on developing human potential, not seeing people as static things with static skills, but rather individuals who the organization can help to thrive and grow, thus returning value to the organization at the same time the individual grows. "It consists of enhancing the development of actual human potential, instead of accumulating fleeting competencies, so striking is the difference between the potential skills individuals possess and the jobs they are actually entrusted with (p. xvii)."

Not enhancing or even recognizing the need for developing human potential has serious consequences according to the body of SEAM research which has taken place. Organizations that do not develop their human potential are less profitable, and fail at a higher rate than those organizations that focus on building human potential. This statement is backed up by over 35 year of research equaling more than million hours (Savall & Zardet, 2008).

According to the proponents of SEAM, what is inhibiting the growth of human potential is the TFW Virus, and thus I began my dissertation looking for the virus and its effect on American organizations because SEAM is the solution, the cure for the TFW Virus. If this study demonstrated that the TFW virus exists in American organizations, then it follows that the methods of change recommended by SEAM and employed in other locations around the world may have a positive effect on organizations in the United States.

One of the reasons that the metaphor of the virus works so well is that it helps explain what is happening on several levels. It would be incorrect for me to state that I felt anyone in this study set out to create an inhumane organization that depersonalized workers. The contrary is true. The supervisors I talked to at Manufacturing Corp. were concerned about the people that worked there and their espoused value was that they wanted workers to be happy, productive, and to ultimately be satisfied in their careers. Here the virus analogy helps make sense of what is happening. When we are sick, we want to be healthy but there is some causal factor preventing that from happening. In this case, there is infection that is preventing healthy organizational behavior, much the same way a virus can prevent the healthy body fighting off secondary infections. It is not the "fault" of the person that is sick, it simply is.

The second reason that the virus analogy works in this case is that the organization can function, and even do some things well but it is never going to be as healthy as it could be as long as the virus is present, and under stress the virus is likely to cause additional problems.

When a person has a virus they can appear healthy and likely function at a high level. Some viruses even lie dormant. However, when the body is put under stress, the effects of the virus can truly be seen. For instance, a person who has a viral infection causing minor respiratory

problems can probably walk fine, but ask them to run two miles and those minor problems caused by the virus are likely to become much worse.

Finally, the virus metaphor works because it is spread through contact. If one person does not wash their hands and shakes the hands of another, the virus moves. Again, it is not the intent of the person to spread the virus. It is polite and accepted to shake hands. In fact, not doing so may be rude. But, inadvertently the virus gets spread. Once the virus is in an organization, or a manager it can be spread as the tactics of one organization are studied and applied in another setting, or a manager moves from job to job, company to company.

The Extent of the Discovery of the TFW Virus in American Organizations

The research question was, "Do management practices of American organizations reveal and transmit the TFW Virus?" In this particular case the short answer is yes, and from that one can conclude that an ideology exists that is having an effect on behavior in the organization and that ideology is connected to the ideology of management put forth by Taylor, Fayol, and Weber. By looking at the particular ways organizational behavior displays or encourages depersonalization and submission, an aristocratic view of the organization, apathy and separation.

There is a system of beliefs and values as laid out in the themes portion of the findings found in chapter four. There is a consistency to the feelings that people reported and how these feelings affected their own behavior. What's more, the TFW Virus can be seen throughout the system, because each of the themes may connect with several elements of the virus.

An ideology exists that is having an effect on behavior in the organization. As I discussed in chapter one, ideology "... describes the system of beliefs, values, and practices that reflects and reproduces existing social structures, systems and relations" (Brookfield, 2005, p.

68). An ideology is put forth as the true system of belief within the dominant group and is propagated as the one true way. Seeing the underlying ideology helps me to understand why the behaviors that I witnessed and heard about exist at Manufacturing Corp. It is also possible to connect these with the TFW Virus.

Manufacturing Corp. did not set out to have this ideology. In fact, it probably set out with positive motives and much different ideology, but in the themes I found this ideology inside the company. Behavior communicates the ideology of an organization, and in this case it is the themes gained from witnessing the behavior that bring me to the place of identifying the ideological make up of Manufacturing Corp. At the conclusion of this study, I saw that Manufacturing Corp. is a place where depersonalization, an aristocratic view, apathy and separations are all apparent.

Depersonalization and Submission. At the end of the process, I wanted to review the specific evidence of the virus found in Conbere, Cristallini, and Heorhiadi (2014) to see what connections could be made. The table below shows a partial list of indications of massification and depersonalization in business. The extent it can be tied directly to what is happening at Manufacturing Corp. is remarkable.

- Job profiles and job descriptions
- Job Classifications
- Systems of equal pay and / or automatic pay
- A high number of people under a single supervisor
- Procedures and standards without exception and without flexibility
- Changes without consultation, without explanation and without training

Job profiles and job descriptions are a part of almost every job, and they are a part of the job at Manufacturing Corp. Remember, one of the first things that people said when I asked the question, "Tell me about your work at Manufacturing Corp." was their title and position specific to what their position was and the area where they worked. They identified very strongly with that classification and position and knew acutely where they were in the world of work. Job classifications are similar. There were clearly defined roles for engineers, maintenance people, management, and the floor workers that I talked to.

Pay was often part of my conversations and was one of the many positive things that individuals talked about in terms of working at Manufacturing Corp. They particularly mentioned profit sharing. The system of pay and incentives appeared to be automatic based on the productivity of the plant, not the worker. This came out when individuals talked about the work ethic of others, and indicated they felt it was not fair they had the same pay or benefits when they perceived they were working harder. At Manufacturing Corp. a single supervisor supervised a team of more than twenty.

Procedures and standards without exception and without flexibility is part of the design at Manufacturing Corp. Part of the Lean journey is to find the "best way." Of course that goes under the name "continuous improvement, but the goal is really to find the best way and then

employ that way. Documentation tells the individuals on the floor how to do every single component of their job, down to minor details and those cannot be changed.

One of the frustrations that the floor workers expressed was about changes without consultation, without explanation and without training. This again is tied to other part of the virus, as the consultation is happening in small teams sent forth to work on Lean projects, but then they communicate that back to the group. It is related to the aristrocratic view, as those chose to work in the Lean events get to make the changes, but not those that were not part of the projects.

Aristocratic View. Individuals in the study held an aristocratic view of the organization and an expectation that management was about command and control, this connects the ideology of how individuals are viewed in the organization. The TFW Virus starts from the assumptions that people will submit, and that people must be controlled or managed (Cristallini, 2012). These two assumptions also play out in that people trade their freedom for money, which is essentially what work is, and that this division between work and life means that none of the strategies, creativity or energy that individuals apply in their personal lives will be applied at work. Individuals only work for money.

This essential view of people is similar to McGregor's (1960) comparison of Theory X versus Theory Y. He compared two theories about people. Theory X started with the belief that management must counteract an inherent human tendency to avoid work. Meanwhile, theory Y assumed that people will exercise self-direction and self-control to help the organization meet its goals to the degree that those people are committed to the same objectives. The TFW virus is theory X is action. The symptoms flow from this belief that management must control, and rejects the ideas put forth in theory Y.

One example that came up with some workers demonstrated for me how the ideology that people must be controlled or managed plays out in the everyday life of the workers. The implementation of a time clock for breaks was connected to the theme of a lack of control at work. In short, a new time clock system was being implemented for individuals to clock out or in particularly when taking breaks. The problem that both workers and managers seemed to report was that some people were not being accountable with their time, and were getting away with something by taking extra time during breaks. Because the underlying ideology at Manufacturing Corp. is that workers need to be controlled, and must counteract the human tendency to avoid work the solution was a time clock. While a worker like Hannah F. thought this was a bad idea, workers like Cameron F. were supportive of the idea because it would hold others accountable. The important point here is that the ideology is pervasive. Cameron F. seems to share the ideology that individuals will avoid work when possible.

If the ideology in the organization was different and more in line with theory Y I can imagine a different set of solutions that may in fact be more beneficial to the company. For instance Madison F. was concerned the new clock system would actually make communication problems between shifts worse because she might not be able to stay early or come late to get more information and learn about the shift ahead. The new clock system was actively working against her being fully engaged and giving time to the company she would willingly give to make her job easier. A more theory Y solution would engage the workers in the solution, and importantly it would evaluate what problem was really trying to be solved. Beneath the surface problem of people taking breaks that are too long are likely other underlying causal problems but by just looking at ideological shorthand that workers will avoid work, the solution that is indicated is to put in a system to more effectively control employees time.

There is also a clear connection here with the ideas of Frederick Taylor, the T in the TFW virus. First, there is a practical connection in that some of Taylor's earliest experiments were to introduce time clock and time studies (Merkle, 1980) with goals similar to those that appear to be in play at Manufacturing Corp. Secondly, and more importantly, Taylor believed in the worker as machine advocating systems in which one worker could easily step in for another.

Apathy. One of the clearest ways I saw evidence of the virus was in the apathy that existing at the floor worker level, and it is one of the things that I think was having the greatest immediate negative affect. People at Manufacturing Corp. expressed their apathy in that it was too painful to fully engage in the organization, or that they did not feel they can move to the next level in the organization so they have quit trying.

As a result of the apathy occurs and there was a sense that the current situation is this is the best that the workers can ever hope for. It is this lack of hope, or even recognition that the organization could be a better place where apathy shows up the most. The floor workers have simply quit expecting or believing that the organization could provide more.

Separations. One of the key ways that Conbere, Cristallini, and Heorhiadi (2014) say that the virus can be found is in separation in the organization, marked off by borders, walls and fences. Using some of the separations that they indicate the examples at Manufacturing Corp. included:

Table 3
Separations and examples

Separation between:	Example
Noble tasks, menial tasks	Management is a noble task, floor work is menial

	Engineering is a noble task, floor work is menial
	Lean events are a noble task, day to day work is menial
Implementation and	Floor workers implement, supervisors monitor
monitoring	
Competition between sites	Shift to shift
within the same company	Functional area compared with the next functional area

Separations are tied particularly to the work of Fayol, who introduced the concept of the division of administrative tasks. At Manufacturing Corp. it is at these separations or borders where people meet that the conflict seems to occur and there is a loss of some kind of productivity or negative consequence. The communication issues are one example. Workers at the company reported several times that there were communication issues, but these always seemed to occur along these default lines between areas of the plant, between shifts, or between management and workers. It seemed to indicate what were pointed to as communication problems may have been closely related to the inability to communicate effectively across these default lines in the organization. It did seem like a good deal of time and energy was going in to managing the divisions.

Why it matters for Manufacturing Corp.

The founders of SEAM argue that over the past forty or fifty years the global marketplace has changed in such a way that the previous ways of management, with their basis in the work of Taylor, Fayol, and Weber are unable to meet what this new marketplace demands. They encourage a management style, "based on teamwork, involvement and empowerment, training, communication and negotiation (Savall, Zardet & Bonnet, 2008, p. 11)." Based on the

discussions I had with supervisors and leaders at Manufacturing Corp., I believe they would agree that this is the management style they see as being the best for their future, but I seem to have no shortage of evidence where they are doing things that inhibit those very things. It is the presence of the virus that explains why they are not getting able to make good on the promise to build this new style of management.

If the data indicates the clear presence of the TFW Virus in a specific U.S. manufacturing organization one of the questions I continually asked myself toward the end of the project was, "Does it matter?" This question kept coming up as I reflected on the fact that, as stated above, Manufacturing Corp. appears to be a very good place to work, and it turns a profit. In the end, I concluded that it matters because Manufacturing Corp. will never be able to sustain and grow its success if the current ideology is allowed to persist. If that happens, rather than growing the "human capital", they will burn it up. If you treat human beings like fuel in the industrial machine they eventually go the way of all fuel, they get costlier and costlier and then eventually used up. If you look at people as a resource, something that can be grown, the potential for ongoing production is limitless.

Depersonalization and submission matter because people do not do their best work when they do not engage at a deeper level. With depersonalization and submission you can get people to change their behaviors, but not fully engage their hearts which is the true key to leadership and productivity.

The Aristocratic view of the organization makes a difference because if people feel that they are born into their place or that they are not among the chosen then they are likely to strive to move beyond that. Additionally, in the modern, globalized workplace it has been proven that the best decisions are made by diverse teams. Organizations with and aristocratic view are

inherently going to deny the contributions of some, leading to fewer ideas and again, less creation of human capital. In the aristocratic (or bureaucratic) organization, time is spent creating and enforcing rules that keep the aristocracy in place. A tremendous amount of organizational energy is wasted as individuals seek to control rather than to create.

Apathy keeps workers from contributing their best ideas and best selves to the workplace. At a place like Manufacturing Corp. this may show up in subtle ways like high absenteeism, but it is also dangerous and costly. In the manufacturing process there are times when not being fully engaged can lead to dangerous situations with machinery, chemicals or other workplace hazards. Beyond that, as one person point out, in the organization there exists the possibility for million dollar mistakes. Each defect in the product is potentially damaging to the long term bottom line for the company.

Separations may be the area that I have seen most commonly and are the most costly.

When I think about the time and energy spent trying to get people to work together, or people and machines to interact, I see thousands of hours in lost productivity and energy sapping conflict. Because the conflict is negative and largely interpersonal, there is not the energy that comes from creative friction as people work together to solve problems. At Manufacturing Corp. many of these separations were reported as communication problems, and in my experience I see that time and time again. When people do not agree, they sometimes put the blame on the communication as a way of depersonalizing it and separating. However, this has the effect of making the separation wider.

One of the affects in an organization infected with the TFW Virus is chronic underperformance due to the loss of human potential. Organizations with the virus are not reaching their full potential, nor are individual employees reaching their full potential. In an

organization like Manufacturing Corp. this may not be readily apparent as the current market forces do not require them to develop potential, but at some point it will.

Another effect of the TFW Virus is an ever increasing bureaucracy (Merkle, 1980). The divisions that take place require additional levels of management, and more and more separation is encouraged. This is a direct effect of Fayol's approach to managerial separation, and Weber wrote explicitly that bureaucracy had the effect of creating more bureaucracy. There are two areas of potential thinking about this. One is that organizations could be improved and made more profitable by effectively cutting down on bureaucracy and division. This is not a new idea. For instance in any company workers immediately call for cuts in "management" when times come. However, like many of the implications of the TFW Virus, it caused me to ask, "What if they are right?" The TFW Virus expands the administration. The second related implication to this explosion of the administrative class is what the effect is on systemized thinking. This seems to be a key skill that successful businesses are employing, but the inertia created by the virus seems to reward ever widening division (Merkle, 1980) rather than encouraging the systematic thinking that so many organizations say they need today to be successful.

Implications for management and leadership

The presence of the TFW virus as a flawed ideology demands nothing less than a radical rethinking of management and leadership education. After framing the ideas of depersonalization and submission in the ways above, I needed to go further and ask if these are really a problem. Cristallini (2011) makes a compelling case they these concepts are indeed problematic. Additionally, in the words Einstein, "If you behave in the way you have always behaved you are going to get the results you have always gotten." Few would argue that the organization results we see in contemporary America are without room for improvement.

The virus of TFW is worth exploring because of the implications that lead from considering that there may be an unexplored ideological flaw. A supporter of Taylor, Peter Drucker, claimed that Taylor's impact on the modern world should be considered alongside Karl Marx and Sigmund Freud (Locke 1982). If Taylor's impact can be compared to Marx and Freud, it is worth considering how greatly the ideas of Marx and Freud have been debated and in fundamental ways either adapted or changed with the consideration of new research, experience and information. I cannot even begin to think about what the field of modern psychology would look like if people had not been willing to study and in many cases challenge the theories of Freud.

In setting forth the TFW Virus, Cristallini (2011) has introduced an idea which is a foundation for further exploration and exciting new discovery. Having said that, the very lines of questioning that the TFW Virus opens up are likely to be very challenging and immediately met with resistance because they are at the very core of what people believe to be true about organizations. As one example, in my research I seemed to find a recurring cycle since at least the late 1970's of Taylor being criticized, and then a chorus of leaders and thinkers rising to reassert Taylor's ideas and defend him more vigorously. Previous questioning of Taylorism appears not to have discredited the ideology at all, but has rather served as a platform for promoters of Taylor by defending and further cementing his ideas.

In positing his theory, Cristallini (2011) stated that one can see evidence of the virus in the repetitive actions of organizations. To test the face validity of Cristallini's diagnosis, one could ask if there are repetitive actions across many different types of organizations that would reveal a common ideology.

The actions that Cristallini (2011) discussed can be seen in repetitive behavior and in artifacts like text books. Accounting textbooks for instance include significant amounts of ideological homegeniety (Ferguson, Collison, Power, Sevenson, 2006). The authors of this study found that even though there was a realization that the dominant texts were largely the same, the power to change them was outside the grasp of either the authors or the editors. Inertia kept ideology the same. Interestingly, the study also argued that one way for the dominant ideology to be further cemented was to introduce new ideas but either downplay them or explore them inadequately so that these ideas would not gain wider acceptance.

The same held true in management textbooks (Mir, 2003), but what is even more interesting in Mir's study, is that individuals could identify that there was an ideology at play, but seemed unable to articulate it. Mir used an example, "When management texts talk about 'effective managerial practice,' they seldom (if ever) point out that this effectiveness is judged from the point of view of a limited set of stakeholders" (p. 737).

Beyond textbooks there seems to be a similar propensity to repetitive action that is very difficult to change throughout the field of education. When he was President of Harvard University, Lawrence Summers (2011) stated, "Undergraduate education changes remarkably little over time (p. 1)." He went on to paraphrase former Harvard president Derek Bok who compared the difficulty of reforming curriculum with moving a cemetery (Summers, 2012).

If it is true that the field of education and textbooks specifically are slow to change then it is important to consider what contemporary thinkers say about Taylor's contributions to the fields of management and organizations. His ideas are central to the field of management as seen not only in the academic setting but also in the more popular works such as those of management guru Peter Drucker (Locke 1982). "Taylor's views were not only essentially correct but they

have been well accepted by management (p. 22). Linking back to the idea that sometimes the way the dominant ideology dismisses other points of view is by giving them short notice, it is important to note that this analysis of criticism of Taylor calls them, "predominantly or wholly false" (Locke 1982, p. 22).

Looking at just one management practice that is well accepted in U.S., companies gave me another way to look at the implications. The idea of merit as applied in organizations seems to demonstrate depersonalization. Western organizations largely believe that merit is the way that organizations should and do work (Castilla and Bernard 2010). This feeling is supported in both the scholarly community and in practice-oriented communities. The idea being that merit or talent should be the way that people are rewarded and put into certain positions. However, merit as it has been defined by organizations typically means throwing out many of the factors that make us individual human beings. For instance, merit as found to be defined by Castilla and Bernard (2010) often meant that organizations threw out ideals of equality, need, or seniority. The troubling aspect of Castilla and Bernard's work is that the idea that an organization used "merit" as the basis for rewards actually favored groups that have traditionally been in power. They essentially found telling people they were in a meritocracy or that the organization valued merit first, provided a guise by which one could continue to reward those whom have always been rewarded; particularly men and particularly those that are not ethnically diverse. Merit as a concept seems to dehumanize the person to an extent where the organization no longer considers the individual needs, but asks the person to submit their needs to some higher organizational decision making process.

This concept of merit and how it is applied in organizations has a direct link with Cristallini's (2011) explanation of how the TFW virus has contributed to an aristocratic view of

organizations. I cannot help but think of what I see in modern organizations when I read, "the virus is haywire rationality by interfering with three issues: the privileges, the actual competence, and self-denial (p. 4)." Meritocracy as an ideal might in fact be fine, but there seems to be ample evidence that as applied in the modern western organization it is a "perverted hierarchy" as defined by Cristallini (2011).

It is difficult to narrow the focus and talk about implications because if traditional management practices are flawed at an ideological level, then it requires a radical rethinking of management application and education. Similarly, while SEAM offers one cure for the virus, there must be other potential cures that can be put in place.

Implications for O.D.

In the world of Organization Development (OD) there are implications at the micro and at the macro level. The entire idea of being and OD consultant owes itself somewhat to Taylor as he was one of the very first to work as a management consultant (Merkle, 1980). In his foundation book on OD, Marv Weisbord (2004) states, "Indeed, he has stimulated all the social scientists whose lives I sketch in the next several chapters" (p. 27). If I have made the argument that Taylor, Fayol and Weber at the heart of management ideology, it begs the question if the field of organization development has dealt fully with its own possible problems with the TFW Virus. However, in a more hopeful mode it might also explain why some OD interventions are less successful than others and call for us to continue to evolve.

The main implication for me is that ideology matters, and some of what goes under the heading of OD is flawed at a foundational level, and therefore is never likely to work over the long term. For instance, LEAN manufacturing is an ideology. One of the criticisms that I can anticipate of this case study is that ideology is unimportant to individuals in the organization, and

is unimportant to the goals of the organization. However, that argument in itself betrays an ideology. Edward Deming is credited with saying, "Every organization is perfectly designed to produce the results it's producing" (Clawson, 2012, p. 122). The ideology of the organization is the foundation of that design, and this case demonstrates that at Manufacturing Corp. there is an existing ideology that is consistent with the TFW Virus.

Implications for further research

Specifically as it relates to the TFW Virus and the Socio Economic Approach to Management (SEAM), the study suggests two ongoing areas of research. As it relates to the virus this study could be replicated in other parts of the country and in other industries. Additionally, the data in this study might be used as a starting point to look for more systemic implications of the virus and how it spreads. For instance, looking at management classes and tracing the effect of Taylor, Fayol and Weber on modern management theories may be interesting. By expanding the search to the virus to both profit and non-profit organizations one might be able to get a more broad understanding of the presence of the virus.

There are also further research implications for SEAM. SEAM bases its method of intervention partially on the presence of the TFW Virus and the affect that it is having in organizations. If other American organizations are found to be similar, then expanding and studying SEAM interventions in American companies would also be an interesting research project that may yield interesting results for changing the way that American companies approach management. An argument can also be made that American management methods are the most widely spread and the most widely known. By applying SEAM in American organizations and gauging the effectiveness, even broader international implications may be found.

In terms of this case study there are also implications for further research outside of SEAM. The themes of the study indicate that workers are dissatisfied with work, and the literature review confirms this across many different types of organizations. Even in a workplace that looks productive, the workers express high levels of dissatisfaction. There is room for additional research on what the effect of this is. Taken at a broad level, there is a school of thought that says this does not matter if the organization is producing what it is meant to produce. The research that would be interesting is if workers that express these dissatisfactions are actually costing the company demonstrably. SEAM researchers have made that connection, but since as I stated above SEAM has not been widely applied in America, it would be worth following that line of thought to see if there was an affect in American organizations.

Connecting SEAM to Critical Theory

As he founded the approach of SEAM, Henri Savall (2005) took a multidisciplinary approach similar to critical theory. Critical theory was informed by sociologists, economists, psychologist and others. The field is interdisciplinary, being best known by those in philosophy, aesthetic theory, literary criticism and women's studies (Aggers, 1991). During this study, I was impressed by the number of times I came across ideas that existed both in the study of critical theory and SEAM and how the two fields may continue to inform each other.

In the case of both SEAM and critical theory there is a desire to look at ideology as the source of problems. Ideology can be stated as, "A coherent set of beliefs that describes the worldview held by members" (Mir, 2003 p. 735). More than that, both SEAM and critical theory are suspicious of dominant ideologies that go unexplored and their detrimental effect on the society as a whole.

In his article, *The role of governance in the fight against the global pandemic of the techno-economic virus* SEAM intervener researcher Vincent Cristallini (2011) suggested that organizations are not looking deeply enough to find the solution to their problems. He made the case that many of the problems that organizations try to solve are symptoms of a systematic failure that stems from a flawed ideology. Only by looking at the flaws in the ideology can we understand why organizations are behaving in ways which are counterproductive.

Critical theory makes a similar case. According to Brookfield (2005), "The first, and arguably preeminent, learning task embedded in critical theory is that of challenging ideology" (p. 40).

Critical theorists look at the ideology of the whole system; recognizing from the outset that something is not functioning correctly that is preventing a better system from occurring.

Both SEAM and critical theory envision a more hopeful future in which things are objectively better than they are today. "A core belief of SEAM consultants is that organizations do not exist only to make money, they exist to serve society in general and all the employees in particular" (Conbere & Heorhiadi, 2011, p. 6). Habermas grounded critical theory in the goals of the Enlightment, setting out a vision of what some have referred to as a utopia, but Habermas goes further, "His own description of modernity's 'unfinished project' of democratic Enlightenment indicates a real appreciation of diverse modernizing trajectories" (Johnson, 2005, p. 113). To me, this suggested progress, a foundational desire to improve things for people that is core to both approaches.

What is important about this is that both SEAM and critical theory may not agree exactly on what a better future looks like, but they are at their very center committed to the idea of a better future for individual people in the form of a more livable world. This seems to bond them as approaches, and separate them from a number of other approaches. Brookfield (2005) calls

this the normative grounding of critical theory and explains it, "Not only does the theory criticize current society, it envisages a fairer, less alienated, more democratic world" (p. 27).

Using the metaphor of a virus, Cristallini (2011) argues that the entire organizational system is infected. He asserts that business is carrying a hidden virus, and the virus is causing all kinds of problems. It is going undiagnosed as a systemic problem, and other organizational change efforts are treating symptoms rather than the core illness. The virus is passed from generation to generation, and organization to organization. As defined by Cristallini, the virus is essentially a flawed ideology.

Two parts of the virus that Cristallini places at the core of dysfunction are depersonalization and submission. Critical theory has much to say about these two concepts. Erich Fromm, who wrote extensively about alienation, a term that I believe closely matches Cristallini's concepts of depersonalization and submission. While recognizing the advances of the modern age, Fromm (1994) pointed out that the overall affect is that individuals are largely judged by what they contribute economically the system, and what has been lost is the use of production to benefit the salvation or happiness of the worker. SEAM is based on the belief that depersonalization and submissions are not optimal in an organization, critical theory loudly agrees, calling for democracy, and particularly in its exploration of racial and gender issues systems to overcome alienation (Brookfield, 2005).

Another concept found in Critical Theory is hegemony, which includes the idea that people learn to love their oppression because it is the dominant way of thinking. Hegemony seems to sum up the Manufacturing Corp. well, as people are fully "bought in" to many of the things that are actually oppressing them. It is found in items like the person who welcomes the time clock not because they need it, but rather because they are glad their fellow workers will

finally be held accountable. In promoting the use of the time clock the person is willingly giving up their freedom, yet promotes the idea.

The conclusion of SEAM researchers, that a flawed ideology is at the heart of dysfunction and gets in the way of organizations functioning at a higher level, is similar to the conclusion reached by critical theorists as they challenge ideologies in organizations. Ogbor (2000) stated, "Corporate culture, if uncritically examined remains an ideology, which is socially constructed to reflect and legitimize the power relations of managerial elites within an organization and society at large" (p. 590). Working from the work of Marcuse and others, he notes that by not challenging ideology corporations become one dimensional in their thinking and therefore are prone to reduce the number of options and build and promote dysfunctions.

Researcher's Bias

I have written previously about the TFW virus and have a bias toward believing that it exists in organizations, based on my previous experience. Recognizing this bias, I believe, was a key to ensuring that I was not drawing conclusions that simply are not there.

One of the ways that I tested for and limited the bias was to note bias when I believed it occurred in my research notes. After each session, and when there was time between interviews, I did an initial overview, and put a star next to those items that I felt were worth discussing with my advisor or putting forth for further testing because they matched to a great extent what I thought I would find.

This became a helpful tool, and as I went further and began to transcribe and then code the notes of the interviews I often went back to those initial marks to see how they were showing up in further notes. In many cases they did not. For instance, one individual talked a great deal about the effect of technology in the company, and a note I made immediately after the interview

connected the effect of technology to the virus. In the end, no one else made the particular connection he did, and so the idea that technology shaped the organization in a way that made the organization more open to the virus did not end up in the final dissertation. I think this is an example where being aware of potential bias throughout, and trying to note places where I thought it might be occurring helped limit it.

Delimitations and Limitations

Delimitations. Delimitations are the boundaries for the study. The delimitations in this case study are that the data describes one company, the Manufacturing Corp which is located in the Pacific northwest of the United States.

Limitations. There are limitations to interpretive case study. Primarily this is that the data is not generalizable to the broader population (Gall, Gall, & Borg 2007). As an interpretive case study, the goal of this dissertation was to make the case clear, rather than to make generalizations.

The study was also limited in that it took place in the Northwest United States, and in one manufacturing sector. Therefore it cannot be known if the findings would be different in other sectors and geographic locations.

This study was also limited in that I did the research on my own and not as part of a team, which meant that I did not have other team members to test assumptions against. Another limitation of doing an interpretive case study is that it relied on my ability to be able to hear and then code the data correctly. This was a time intensive process and ultimately the study is limited by my ability to correctly identify the phenomenon I observed.

Personal Reflections

After spending the past two years, both before my dissertation writing began and during, I feel as if I turned into a type of TFW virus germaphobe. Through my own professional work, and ongoing consulting and teaching opportunities I continue to see evidence of the TFW virus in my everyday life, and I continue to see more impacts of the virus. One of my dissertation advisors, Vincent Cristallini, seemed to be warning me of this as I began working on this project. Having worked at ISEOR, written about the virus, and acted as an intervener-researcher he noted that the virus is all around us. Finding evidence is no real trick. After working on this project I agree with him.

The main argument that I would expect from American organizational leaders is that they do not believe that dehumanization and submission are core to the ideology of American organizations. In fact, I would predict a steady stream of arguments based on mission statements and the relatively recent focus on ethics education in western business schools as evidence that the behaviors indicating depersonalization and submission are not encouraged or rewarded. The argument that one can predict would be employed is that these behaviors are the product of a few bad actors and not endemic in the system. However, from this case study and the literature review I concluded that depersonalization and submission are the symptoms of the TFW virus and do occur in American organizations.

Having said that, being critical of Manufacturing Corp. feels radical, which may say something about how deeply my thinking is infected with the virus. To the individuals who work at and manage Manufacturing Corp. it is truly a great place to work, and by most measures of corporate success it is a shining star. It provides relatively clean, high paying manufacturing jobs and returns money to its owners and to its employees. By the gold standard of American

organizations – profit - it is a nothing less than a star. What makes it even more remarkable is that the people who that work there have a high level of trust in its managers and appreciate what the company has done for them personally.

The fact that Manufacturing Corp. was so good made it the perfect place for me to discuss the impact of the virus because this company had so much going for it. If I were to look for evidence of the virus in a company that was in turmoil, it would be easy to dismiss the TFW virus as a cause and just point to bad management, bad market conditions, or bad workers. That I could find the virus in a company that was doing so well indicated to me not only that the TFW Virus was present and active, but that understanding the virus better may in fact yield important avenues for improving many types of organizations.

The more I heard about Lean and the commitment to it at Manufacturing Corp. the more I began to see that Lean really is a powerful ideology, and that it is an ideology that mirrors the TFW Virus. Moreover, Lean has many of the elements of an ideology and is recognized as such. "Lean is an ideology based on rationality and scientific methods" (Bhasin, 2012, p. 537). To me this is a powerful statement about why the study of ideology is important, because organizations are promoting ideology, but in some cases they just are not being honest about it.

Lean is a Japanese management system, but the systems history suggests it may be infected with the TFW Virus. The Japanese sent a delegation to America in the 1910's to study Taylorism (Merkle, 1980). Additionally some have made the argument that Taylor's ideas found their way to Japan, and Lean as coming out of Japan is really the Japanese repackaging of Scientific Management (Kennedy, 2012). There is also evidence that Fayol's ideas were carried out in Japan (Fells, 2000).

The focus of many of the Lean events I heard about at Manufacturing Corp., was to map the best process, trying to remove the human element. These events are in their own way very depersonalizing. Many people seem to promote Lean events as a way to remove the people from the problem, in a way that seems to indicate a point of view that the people are the problem. In the short term, the process is better, but in the long term what seems to be communicated is that people do not matter.

Having reflected on leadership literature, I concluded that there are strong anti TFW-Virus elements. Collins' model of Level Five Leadership, Greenleaf's Servant Leadership model and Clawson's Level Three Leadership focus on the need to invest in and grow people. While not using the words "human potential," part of what they feel makes great leadership is the time and energy invested in people. The presence of the virus might also explain why so many people complain about the leadership that they are seeing. It is a double edged sword. On one hand, people have been trained by the TFW virus to see depersonalization and submission as part of the role of a leader. I go back to the many workers at Manufacturing Corp. who expressed that they sought "fairness" from management or for everyone to be treated the same. Their outward expression was that they thought good managers should treat all the same. However, in digging around at the deeper level of values what I found many people saying is that they wanted to be recognized for their good work and they wanted to be noticed. These two things seem to be in conflict with each other. So, on one side of the coin people might not in general have the right idea about what leadership really is.

The other side of the coin is that even among those that have read books about leadership and espoused the values of good leadership like valuing people and not depersonalizing or asking them to submit, they inevitably take the advice of the leadership books and reinterpret those

ideas to fit within the confines of the virus. Recently, I had the opportunity to hear Jim Collins (2014) speak about his books. During the opening speech of a conference he talked about some key leadership points from his books. Two points in particular were the concept of the "twenty-mile march" and "confronting the brutal facts." Both of those particular lessons when studied closely seem to reject the concepts promoted by the TFW virus. The concept of the twenty-mile march is really that success is not dependent on conditions, and the key is despite the conditions make steady progress towards goal. "Confronting the brutal facts" is the idea that organizations need to ask hard questions and take their challenges straight on. Over the next three days at the conference in sessions and in coffee shop conversations I heard those concepts used again and again, but each time reinterpreted to fit the dominant ideology. A statement that began with "You have to confront the brutal fact that . . ." was always followed by an opinion about how someone else felt or how someone else was holding up the reigns of progress.

Over the course of the three days the concept of the "twenty mile march" seemed to be used to explain how difficult our jobs were everyday and that we had to just keep working harder. It was used as a bit of a club to make anyone who was not feeling overworked feel like they were not really contributing to the greater good of the organization or the organization that they were employed it. Rather than a mantra for steady progress, it became a mantra for overwork and submission.

"Confronting the brutal facts," was slightly more nuanced but equally reinterpreted into the ideology of the virus. Collins is fairly specific about what "facts" are. Over the course of the three days the concept really became an excuse to turn opinions into facts and in many cases to give organizations an excuse for not getting things done.

When thinking about the virus, another thing I reflected on is what is happening inside the Fortune 500. The list has gone through a radical overhaul in the past fifteen years, and I wonder if a connection can't be made with the virus, and a new crop of companies emerging that have been created outside the traditional paradigms of management. For instance, a company like Google has some observable behaviors that make it appear like they value people and do not have some of the elements of the virus. Meanwhile, many companies that have been honored and revered over the years in the Fortune 500 have fallen out of the list, or even been sold or shuttered. It would be interesting to study if these new companies built largely by outsiders from the traditional MBA route are without the virus, or if they are just affected at a lesser level.

During the project I also found myself at times thinking feeling that the writings of the men the TFW virus were named for were misinterpreted and misapplied in ways that would have been distressing to them. This is particularly true of Weber. His work seems to be the most widely debated, and as the one of the three men who was an academic, not someone engaged wholly in the practice or study of management his writings seem also cover the most ground and cross industries. For instance, Weber's writings are used as much in legal theory as they are in management theory. The quote that stuck out to me was, "Weber's ultimate historical concern was the loss of human dignity" (Samier, 2002, p. 590). It appears to me that Weber's ideas are the most misused, and that his keen warnings about the problems of bureaucracy have been ignored. "In The Protestant Ethic and Spirit of Capitalism, Max Weber warned the rationalist spirit ushered in by asceticism had achieved a momentum of its own and that under capitalism, the rationalist order had become an iron cage in which humanity, save the possibility of prophetic revival, imprisoned" (DiMaggio & Powell, 1983, p. 147). Weber seems to have understood that an unavoidable outcome of bureaucracy was depersonalization and submission.

This made me wonder what he would think of the way his theories have been applied in management.

While working on this project I continued to do some teaching, consulting and work. The dissertation work made me view these activities differently and one particular experience led me to theorize about how negative financial performance affects the presentations of the virus. While working in a company similar to Manufacturing Corp. over a six month period I observed many elements of the virus. While Manufacturing Corp. seemed to be doing very well in the industry this client company was having a difficult time financially. During my six months with the company I saw high levels of apathy, and increasing levels of control. For instance, at one point they turned out a six page single spaced outline for how to have meetings, that included three appendix for planning, taking notes, and then summarizing the meeting afterward. The documentation was observable, but beyond that I had the opportunity to engage with several individuals at the company and here why these meetings standards were being put in place. Essentially, the meetings standards appeared to be a way to control conversation, and the stated goal was to "reduce waste" in meetings. In practice, it limited meeting time and discussion and therefore limited any generative discussion on the part of those that worked in the plant. From my six months working with the company this is just one example of an organization that seemed to exhibit increasing levels of control and depersonalization as things got worse financially.

This experience and reflecting back on previous professional experience led me to theorize that the virus becomes more and more apparent as stress is placed on the organization. This is another place where the metaphor of the virus works quiet well. Medical professionals know that stress on the body can worsen the symptoms of a virus, and I believe that is possibly

what I was seeing here. It matches up with my previous experience as I think back to times when I myself was under stress and rather than defaulting to more humanizing practices, I immediately moved to the idea of controlling the situation.

Finally, I have thought about what led to the TFW Virus. There were factors specific to the way in which society came out of the enlightenment and into the industrial age, but I think I have seen a thread even further back to the work of Aristotle and his rational world theory.

Fisher (1984) gives five concepts that define the rational world paradigm. Those foundational elements can be summed up in the assumption that humans are rational beings, human decision making has clear cut structures and that the world is a logic puzzle that can be solved through the application of reason and analysis.

Fisher contrasted this with the narrative paradigm. He stated that humans are essentially storytellers and that we are conditioned by culture, history and other factors to look for narrative probability that is a story that rings true to us as people who have strongly held values.

While some may see this theory in conflict with the rational world theories, Fisher did not see it that way in this piece. "In truth, however, the narrative paradigm, like other paradigms in the human sciences does not so much deny what has gone before it as subsumes it" (p. 3). Fisher argued in the piece that the narrative paradigm could lead to a greater understanding of persuasion, but should be understood alongside the rational world paradigm. One way to look at it is to see the narrative paradigm as a large circle with the rational paradigm making up a smaller circle within it. Fisher's explanation was that people do use logic and facts to make decision, but that is just a part of what people take in when making a decision. He sees the narrative perspective as overarching. People include the logos parts of a story in their decision making, but it is only a part. What is of greater importance in persuasion is the overall themes

and the entirety of the story being told. People use their values to make a decision, not only on facts, but also on those things that held to be true from culture, previous experience, or any of a number of other factors. Thus, Fisher describes people as "valuing" beings (p. 5).

The number of thoughts, areas of interests, and connections that looking for the TFW Virus leads me to the conclude that looking for and discussion the virus has incredible value and could be used as a foundation tool to continue to improve organizations and more importantly the lives of those in them. One of the reasons that I found the TFW Virus so interesting is because I think it has given me a language to discuss what is happening to people in organizations. When immediately asking someone if their organization promotes depersonalization and submission my experience is that few would come straight out and say "yes", but when I talk about specific behaviors and can link back the historical antecedents it leads to a much richer conversation.

Final Thoughts

There is arrogance in applying the elements of this case study to call for a fundamental rethinking of management education, OD practice, and the way that American organizations are managed on a day to day basis. Having that discussion allows us to talk at a core level about what we think and believe and those are likely to be hard discussions. It is also likely that in those discussions we will have to question some people and practices that have gone years without critical study.

As I was working on the final chapters of this study is was the work of Chris Argyris (2000) that I turned to for inspiration. In opening his book *Flawed Advice and the Management Trap* Argyris took on a few of the biggest names in leadership and pointed out gaps in their advice. He points out that it is the inconsistencies that are getting in the way of the good that

each author is trying to encourage and states, "We need to better understand the costs –often the hidden costs-of this pattern, as well as the unintended consequences to which it so often leads" (p. 37). Imagining a better future for workers, organizations, and communities requires us to look at our ideology, and make sure that behaviors in our organizations are reflective of espoused organizational values.

References

- Argyris, C. (1998). Empowerment: The emperor's new clothes. *Harvard Business Review*, 76(3), 98-105. Retrieved from http://ezproxy.stthomas.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true &db=buh&AN=547147&site=bsi-live
- Argyris, C. (2000). Flawed advice and the management trap: how managers can know when they're getting good advice and when they're not. Oxford: New York.
- Argyris, C. (2002). Teaching smart people how to learn. *Reflections*, *4*(2), 4-15. doi:10.1162/152417302762251291
- Aggers B. (1991). Critical theory, postructuralism, postmodernism: their sociological relevance. *Annual Review of Sociology*, 17, 105-131.
- Bhasin, S. (2013). Analysis of whether lean is viewed as an ideology by British organizations.

 Journal of Manufacturing Technology Management, 24(4), 536-554.

 doi:10.1108/17410381311327396
- Chanlat, J. F. (2007). Management theory. In G. Ritzer (Ed.), Blackwell encyclopedia of sociologydoi:www.blackwellreference.com/subscriber/tocnode.html?id=g978140512433 1_chunk_g978140512433119_ss1-19
- Castilla, E. J., & Benard, S. (2010). The paradox of meritocracy in organizations. *Administrative Science Quarterly*, 55(4), 543-576.
- Clawson, J. G. (2012). Level three leadership: getting below the surface (5th ed.). Boston: Prentice Hall.
- Collins, J. (Director) (2014, April 5). Keynote Address. *AACC Annual Convention*. Lecture conducted from AACC, Washington D.C.

- Conbere, J., & Heorhiadi, A. (2011). Socio-economic approach to management. *OD Practictioner*, 43(1), 6-10.
- Conbere, J., Alla, H., & Cristallini, V. (2014) The TFW virus: Why so many organizations act in ways that hurt their interests (Working paper).
- Cristallini, V. (2011, March). The role of governance in the fight against the global pandemic of the techno-economic virus., Paris, France.
- de Juan, A. (2003). From good bankers to bad bankers: Ineffective supervision and management deterioration as major elements in banking crises. *Journal of International Banking Regulation*, 4(3), 237.
- Engwall, L. (2007). The anatomy of management education. *Scandinavian Journal of Management*, 23(1), 4-35.
- Fells, M. J. (2000). Fayol stands the test of time. *Journal of Management History* (Archive), 6(8), 345-360. doi:10.1108/13552520010359379
- Ferguson, J., Collison, D., Power, D., & Stevenson, L. (2006). Accounting textbooks: Exploring the production of a cultural and political artifact. *Accounting Education*, 15(3), 243-260.

 Retrieved from http://ezproxy.stthomas.edu/login?url=http://search.ebscohost.com/login.aspx?direct=tr
- Festing, M. (2012). Strategic human resource management in Germany: Evidence of convergence to the U.S. model, the European model, or a distinctive national model?

 **Academy of Management Perspectives, 26(2), 37-54.

&db=buh&AN=22172532&site=bsi-live

Fisher, W. (1984). Narration as a human communication paradigm: the case of public moral argument. *Communication Monographs*, *51*, 1-22.

- Fry, B. R., & Nigro, L. G. (1996). Max weber and US public administration: The administrator as neutral servant. *Journal of Management History* (Archive), 2(1), 37-46. doi:10.1108/13552529610105654
- Gall, M., Gall, J., & Borg, R. (2007). Educational research: An introduction. (8th ed.). Boston,MA: Pearson.
- Gallup Inc., (2013). The state of the American workplace: Employee engagement insights for u.s. business leaders. Washington D.C.:
- Ghoshal, S. (2005). Bad management theories are destroying good management practices.

 **Academy of Management Learning & Education, 4(1), 75-91.

 doi:10.5465/AMLE.2005.16132558
- Gopalan, S., & Stahl, A. (1998). Application of American management theories and practices to the Indian business environment: *American Business Review*, 16(2), 30. Retrieved from http://ezproxy.stthomas.edu/login?url=http://search.ebscohost.com/login.aspx?direct=tr &db=buh&AN=694995&site=bsi-live
- Kennedy, A. (2012, November). *Taylor's illusion*. Paper presented at the Conference on socio economic approach to management. Minneapolis, MN.
- Locke, E. A. (1982). The ideas of Frederick W. Taylor: An evaluation. *The Academy of Management Review*, 7(1), pp. 14-24. Retrieved from http://www.jstor.org/stable/257244
- McMilan, J. (2008). *Educational research: fundamentals for the consumer*. (5th ed.). Boston, MA: Pearson.
- Merkle, J. (1980). Management and ideology: The legacy of the international scientific management movement. Berkeley: University of California Press.

- Parker, L. D., & Ritson, P. A. (2005). Revisiting Fayol: Anticipating contemporary management. British Journal of Management, 16(3), 175-194. doi:10.1111/j.1467-8551.2005.00453.x
- Payne, S. C., Youngcourt, S. S., & Watrous, K. M. (2006). Portrayals of F.W. Taylor across textbooks. *Journal of Management History*, 12(4), 385-407. doi:10.1108/17511340610692752
- Pryor, M. G., & Taneja, S. (2010). Henri Fayol, practitioner and theoretician revered and reviled. *Journal of Management History*, *16*(4), 489-503. doi:10.1108/17511341011073960
- Roper, M. (2001). Masculinity and the biographical meanings of management theory:

 Lyndall Urwick and the making of scientific management in inter-war Britain. *Gender,*Work & Organization, 8(2), 182.
- Samier, E. (2002). Managerial rationalisation and the ethical disenchantment of education: A Weberian perspective on moral theory in modern educational organisations. *Journal of Educational Administration*, 40(6), 589-603. doi:10.1108/09578230210446063
- Savall, H., & Zardet, V. (2008). *Mastering hidden costs and socio-economic performance*. (1st ed.). Charlotte, NC: Information Age Publishing Inc.
- Schein, E. H. (1999). *Process consultation revisited: building the helping relationship*. Reading, Mass.: Addison-Wesley.
- Schreurs, P. (2000). On the reception and reinterpretation of rationality in the field.

 *Administrative Theory & Praxis, 22(4), 732-750.
- Shah, R., & Ward, P. T. (2003). Lean manufacturing: Context, practice bundles, and performance. *Journal of Operations Management*, 21(2), 129-149. doi:http://dx.doi.org.ezproxy.stthomas.edu/10.1016/S0272-6963(02)00108-0

- Simha, A., & Lemak, D. J. (2010). The value of original source readings in management education: The case of Frederick Winslow Taylor. *Journal of Management History*, 16(2), 233-252. doi:10.1108/17511341011030129
- Smith, I., & Boyns, T. (2005). British management theory and practice: The impact of Fayol. *Management Decision*, 43(10), 1317-1334. doi:10.1108/00251740510634895
- Stake, R. E. (1978). The case study method in social inquiry. *Educational Researcher*, 7(2), 5-8.
- Stevenson, R. B. (2004). Constructing knowledge of educational practices from case studies. *Environmental Education Research*, 10(1), 39-51

Summers, L. (2012, January 20). What you (really) need to know. *The New York Times*.

Weisbord, Marvin. (2004). Productive workplaces revisited. Hoboken NJ: Pfeiffer.