



**NAVAL  
POSTGRADUATE  
SCHOOL**

**MONTEREY, CALIFORNIA**

**THESIS**

**THE SIGNIFICANCE OF FIRE SERVICE CULTURE  
AS AN IMPEDIMENT TO EFFECTIVE LEADERSHIP  
IN THE HOMELAND SECURITY ENVIRONMENT**

by

Alan Thomas Cox

March 2012

Thesis Advisor:  
Second Reader:

Christopher Bellavita  
Richard Bergin

**Approved for public release; distribution is unlimited**

THIS PAGE INTENTIONALLY LEFT BLANK

<b>REPORT DOCUMENTATION PAGE</b>			<i>Form Approved OMB No. 0704-0188</i>	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.				
<b>1. AGENCY USE ONLY (Leave blank)</b>		<b>2. REPORT DATE</b> March 2012	<b>3. REPORT TYPE AND DATES COVERED</b> Master's Thesis	
<b>4. TITLE AND SUBTITLE</b> The Significance of Fire Service Culture as an Impediment to Effective Leadership in the Homeland Security Environment			<b>5. FUNDING NUMBERS</b>	
<b>6. AUTHOR(S)</b> Alan Thomas Cox			<b>8. PERFORMING ORGANIZATION REPORT NUMBER</b>	
<b>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</b> Naval Postgraduate School Monterey, CA 93943-5000			<b>10. SPONSORING/MONITORING AGENCY REPORT NUMBER</b>	
<b>9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES)</b> N/A			<b>11. SUPPLEMENTARY NOTES</b> The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. government. IRB Protocol number <u>N/A</u> .	
<b>12a. DISTRIBUTION / AVAILABILITY STATEMENT</b> Approved for public release; distribution is unlimited			<b>12b. DISTRIBUTION CODE</b> A	
<b>13. ABSTRACT (maximum 200 words)</b>  The tragic loss of 343 firefighters on 9/11 monumentally illustrates that firefighters now stand on the front line in the war against terror. The ramifications of 9/11 forced fire service leaders to incorporate newly recognized strategies of terrorism management and mitigation into traditional firefighting roles. Blue-collared manual laborers are no longer the archetype of modern firefighters. Instead, firefighters now command with expanded leadership roles within society and the desire to achieve increased levels of local, regional and national preparedness. This thesis explores the various aspects of fire service culture that negatively impacts organizational leadership, cultural transformation and the fire service's current mission within the homeland security domain.  This thesis starts by providing a detailed description of the elements epitomized by fire service culture. It then examines how both internal and external sociological factors contribute to the perpetuation of fire service culture. Finally, this thesis provides an implementation strategy leaders might utilized when attempting to administer organizational change processes. This author concludes that while leaders might provide a guiding organizational vision, they are but one factor influencing organizational culture. Changes occur when both formal and informal leaders agree upon reasonable organizational goals and orchestrate small cultural shifts when attempting to achieve those goals.				
<b>14. SUBJECT TERMS</b> Culture, leadership, tradition, fire service, social identity, organizational culture, firefighter, organizational change, Seattle Fire Department			<b>15. NUMBER OF PAGES</b> 155	
			<b>16. PRICE CODE</b>	
<b>17. SECURITY CLASSIFICATION OF REPORT</b> Unclassified	<b>18. SECURITY CLASSIFICATION OF THIS PAGE</b> Unclassified	<b>19. SECURITY CLASSIFICATION OF ABSTRACT</b> Unclassified	<b>20. LIMITATION OF ABSTRACT</b> UU	

THIS PAGE INTENTIONALLY LEFT BLANK

**Approved for public release; distribution is unlimited**

**THE SIGNIFICANCE OF FIRE SERVICE CULTURE AS AN IMPEDIMENT  
TO EFFECTIVE LEADERSHIP IN THE HOMELAND SECURITY  
ENVIRONMENT**

Alan Thomas Cox  
Battalion Chief, Seattle Fire Department  
B.S., University of California at Davis, 1992

Submitted in partial fulfillment of the  
requirements for the degree of

**MASTER OF ARTS IN SECURITY STUDIES  
(HOMELAND SECURITY AND DEFENSE)**

from the

**NAVAL POSTGRADUATE SCHOOL  
March 2012**

Author: Alan Thomas Cox

Approved by: Christopher Bellavita  
Thesis Advisor

Richard Bergin  
Second Reader

Dan Moran, PhD  
Chair, National Security Department

THIS PAGE INTENTIONALLY LEFT BLANK

## **ABSTRACT**

The tragic loss of 343 firefighters on 9/11 monumentally illustrates that firefighters now stand on the front line in the war against terror. The ramifications of 9/11 forced fire service leaders to incorporate newly recognized strategies of terrorism management and mitigation into traditional firefighting roles. Blue-collared manual laborers are no longer the archetype of modern firefighters. Instead, firefighters now command with expanded leadership roles within society and the desire to achieve increased levels of local, regional and national preparedness. This thesis explores the various aspects of fire service culture that negatively impacts organizational leadership, cultural transformation and the fire service's current mission within the homeland security domain.

This thesis starts by providing a detailed description of the elements epitomized by fire service culture. It then examines how both internal and external sociological factors contribute to the perpetuation of fire service culture. Finally, this thesis provides an implementation strategy leaders might utilize when attempting to administer organizational change processes. This author concludes that while leaders might provide a guiding organizational vision, they are but one factor influencing organizational culture. Changes occur when both formal and informal leaders agree upon reasonable organizational goals and orchestrate small cultural shifts when attempting to achieve those goals.

THIS PAGE INTENTIONALLY LEFT BLANK

## TABLE OF CONTENTS

<b>I.</b>	<b>INTRODUCTION.....</b>	<b>1</b>
	<b>A. INTRODUCTION.....</b>	<b>1</b>
	<b>B. PROBLEM STATEMENT .....</b>	<b>3</b>
	<b>C. HYPOTHESES .....</b>	<b>13</b>
	<b>D. ARGUMENTS.....</b>	<b>15</b>
	<b>E. RESEARCH QUESTIONS.....</b>	<b>17</b>
	<b>F. SIGNIFICANCE OF RESEARCH .....</b>	<b>18</b>
<b>II.</b>	<b>METHODOLOGY .....</b>	<b>19</b>
	<b>A. METHODOLOGY .....</b>	<b>19</b>
	<b>B. SAMPLE.....</b>	<b>20</b>
	<b>C. DATA COLLECTION .....</b>	<b>21</b>
	<b>D. DATA ANALYSIS .....</b>	<b>21</b>
<b>III.</b>	<b>LITERATURE REVIEW .....</b>	<b>23</b>
	<b>A. GROUP CONCEPTUALIZATIONS .....</b>	<b>23</b>
	<b>B. GROUP COHESIVENESS.....</b>	<b>26</b>
	<b>C. GROUP BEHAVIORS .....</b>	<b>26</b>
	<b>D. SOCIAL IDENTITY THEORY .....</b>	<b>27</b>
	<b>1. Historical Background.....</b>	<b>27</b>
	<b>2. Social Identity.....</b>	<b>29</b>
	<b>E. INTRODUCTION TO CULTURE .....</b>	<b>30</b>
	<b>F. INTRODUCTION TO LEADERSHIP.....</b>	<b>34</b>
	<b>1. Fire Service Leadership.....</b>	<b>34</b>
	<b>2. Early Understandings of Leadership .....</b>	<b>35</b>
	<b>3. Great Man and Traits Theories.....</b>	<b>35</b>
	<b>4. Behavioral, Situational and Contingency Theories of     Leadership .....</b>	<b>36</b>
	<b>5. Leadership Exchange Theories.....</b>	<b>37</b>
	<b>G. LITERATURE SUMMARY .....</b>	<b>40</b>
<b>IV.</b>	<b>FIREHOUSE CULTURE .....</b>	<b>43</b>
	<b>A. INTRODUCTION.....</b>	<b>43</b>
	<b>B. A HEGEMONIC MASCULINE CULTURE.....</b>	<b>44</b>
	<b>C. SENIOR FIREFIGHTERS.....</b>	<b>45</b>
	<b>D. FIREHOUSE STORIES.....</b>	<b>46</b>
	<b>E. SYMBOLS OF PRIDE AND IDENTITY.....</b>	<b>51</b>
	<b>F. ESTABLISHING A “SAFETY CULTURE” .....</b>	<b>55</b>
	<b>G. RISK TAKING BEHAVIORS .....</b>	<b>57</b>
	<b>H. REACTIONARY LEADERSHIP .....</b>	<b>59</b>
	<b>I. GENERATIONAL DIFFERENCES .....</b>	<b>62</b>
	<b>J. BRAVERY &amp; HEROISM .....</b>	<b>64</b>
	<b>K. FIREFIGHTER FUNERALS .....</b>	<b>67</b>
	<b>L. AGGRESSION.....</b>	<b>71</b>

M.	<b>THE FIREFIGHTING ETHOS .....</b>	<b>73</b>
N.	<b>CULTURAL SUMMARY .....</b>	<b>74</b>
V.	<b>CULTURAL PERPETUATION .....</b>	<b>77</b>
A.	<b>THE MEDIA AND IMAGES OF SOCIETY .....</b>	<b>77</b>
B.	<b>IMAGES AND CULTURE .....</b>	<b>79</b>
C.	<b>FIREFIGHTERS AS SYMBOLS OF AMERICAN RESILIENCE .....</b>	<b>83</b>
D.	<b>FIREFIGHTERS AS AMERICAN ICONS .....</b>	<b>86</b>
E.	<b>FIREFIGHTERS AND TELEVISION.....</b>	<b>89</b>
F.	<b>T-SHIRT IMAGERY .....</b>	<b>91</b>
G.	<b>SUMMARY: A TALE FROM TWO PERSPECTIVES .....</b>	<b>100</b>
VI.	<b>DISCUSSION .....</b>	<b>101</b>
A.	<b>INTRODUCTION.....</b>	<b>101</b>
B.	<b>THE FIREHOUSE SOCIAL CONTROL PROCESS .....</b>	<b>105</b>
C.	<b>ORIGINS OF FIREFIGHTERS' COGNITIVE FRAMEWORKS.....</b>	<b>105</b>
1.	<b>The Perception of Risks.....</b>	<b>105</b>
2.	<b>Risk Taking Behaviors .....</b>	<b>108</b>
D.	<b>RECOMMENDATIONS.....</b>	<b>111</b>
1.	<b>Rules, Regulations and Guidelines .....</b>	<b>111</b>
2.	<b>Labor/Management Integration .....</b>	<b>114</b>
	<b>LIST OF REFERENCES .....</b>	<b>121</b>
	<b>INITIAL DISTRIBUTION LIST .....</b>	<b>139</b>

## LIST OF FIGURES

Figure 1.	Patch Themes FDNY Apparatus and Ladder Board Image (From Martinelli, n.d.; Worthpoint, n.d.).....	52
Figure 2.	Department Patches: Seattle Fire Department Patch Image (Flickr, n.d.) and FDNY Patch Image (From New York City, n.d.).....	53
Figure 3.	FDNY Patches (From New York City, n.d.) .....	53
Figure 4.	Ever Ready: Eveready Image (From Cox, 2010; Morris, n.d.).....	54
Figure 5.	Funeral Parade: The Boston Gaelic Fire Brigade played a dirge (From Ryan, 2007).....	67
Figure 6.	Leaving the Church: Thousand Gather in Brooklyn for Firefighter’s Funeral (From Estrin, 2007) .....	68
Figure 7.	Flower Memorial: West Roxbury Fire Memorial (From Globe, 2007).....	69
Figure 8.	Hero Firefighter “Hero Firefighter Chris Fields Carries Baylee Almon” (From Caruso, n.d.).....	81
Figure 9.	Raising the Flag at Ground Zero: Ground Zero Spirit (From Franklin, 2001). .....	84
Figure 10.	Iwo Jima Memorial in Arlington, Virginia (From Visiting DC, n.d.) .....	85
Figure 11.	Superman and the Heroes of September 11, 2001 (From Ross, 2001).....	87
Figure 12.	Fallen Hero (From Tracy, 2007).....	88
Figure 13.	Angelic Firefighter Ice Sculpture Fire and Ice (From Racicot, 2002).....	89
Figure 14.	Real Firefighters. Real American Idol (From Firefighter, n.d. a); Heroes Are (From Firefighter, n.d. b).....	92
Figure 15.	Driving Apparatus: Real Firefighters (From Firefighter, n.d. a); Hell On Wheels (From Firefighter, n.d. b).....	92
Figure 16.	First Due: If You Ain’t First Due (From Firefighter, n.d. a); If You Can Read This (From Firefighter, n.d. b).....	93
Figure 17.	Success at any Costs: Failure Is Not an Option (From Firefighter, n.d. a); No Surrender (From Firefighter, n.d. a).....	94
Figure 18.	Fight To Live: Live To Fight (From Firefighter, n.d. b).....	94
Figure 19.	Real Men Don’t Run (From Firefighter, n.d.a).....	95
Figure 20.	Aggressive Attack (From Black Helmet, n.d.) .....	95
Figure 21.	Loyalty Above All Else Except Honor (From Firefighter, n.d. a).....	96
Figure 22.	Firefighter Brotherhood, the Real Family (From Firefighter, n.d.) .....	96
Figure 23.	Brotherhood, Tradition and Sacrifice: Brotherhood, Tradition Sacrifice (From Black Helment, n.d.); Sacrifice Beyond the Call of Duty (From Firefighter, n.d. b).....	97
Figure 24.	American Hero (From Fireswap, n.d.).....	97
Figure 25.	First In, Last Out: First In, Last Out—Skull (From Black Helmet, n.d.); First In, Last Out—Bulldog (From Firefighter, n.d.b).....	98

THIS PAGE INTENTIONALLY LEFT BLANK

## **LIST OF ACRONYMS AND ABBREVIATIONS**

DCFD	District of Columbia fire Department
DHS	Department of Homeland Security
GAO	Government Accountability Office
FDNY	Fire Department of New York
FLSS	Firefighter Life Safety Summit
LODD	Line-of-Duty Death
MBO	Management by Objective
NIOSH	National Institute for Occupational Safety and Health
NIMS	National Incident Management System
PTSD	Post-Traumatic Stress Disorder
SIT	Social Identity Theory
TQM	Total Quality Management
U.K.	United Kingdom
U.S.	United States
USFA	United States Fire Administration
WTC	World Trade Center

THIS PAGE INTENTIONALLY LEFT BLANK

## ACKNOWLEDGMENTS

I would like to thank the members of the Seattle Fire Department who supported me through this demanding educational program: to Gregory Dean, for providing the departmental resources necessary for this great educational opportunity to come to fruition; to A.D. Vickery, for supporting my application to the Naval Postgraduate School and facilitating advanced learning opportunities; and to those members of the Seattle Fire Department who have paved the way so that others may follow.

A special thanks to my thesis advisors Chris Bellavita and Richard Bergin who gave me substantial latitude during this intellectual journey. Gentlemen, thank you for providing an intellectually challenging learning environment and your unwavering patience. To my cohorts of 0901/0902, thank you for making our time together time well spent.

Finally, I wish to thank my wonderful wife, Gina Cox, for indulging me in this journey into higher education and self-actualization. Thank you for your steadfast understanding during our concurrent forays and struggles in parenthood and the foster care system. Thank you for believing in me and supporting me.

THIS PAGE INTENTIONALLY LEFT BLANK

## **I. INTRODUCTION**

### **A. INTRODUCTION**

Over the past 20-plus years, I have worked in several different organizations as a professional firefighter. In addition, I have worked in a small, university-based fire department and in a large metropolitan fire department with over 1,000 members. I have seen one consistent reality across all these organizations: a very distinctive, almost palpable organizational culture. Some traditions are small and inconsequential, like buying ice cream in round cartons versus square cartons; however, some traditions have the potential to impact organizational performance and safety in deleterious ways, such as not wearing seat belts or not wearing proper personal protective equipment.

Unfortunately, the fire service does not exactly encourage independent thought. From the time new firefighters enter drill school, they are encouraged to listen, to follow directions, and to perform in predictable, measureable manners. New firefighters are not encouraged to question authority or the reasons why certain things are done in particular ways. As a fire ground supervisor, I fully understand the reasoning behind such teaching methods. Recruit training and education programs are designed to create effective, predictable firefighters capable of acting independently and within the operational boundaries established by organization policies and procedures. Fire service training is designed to standardized conduct. However, once these “follow the leader” behaviors are instilled in new recruits, they are very hard to break. Some individuals may perpetuate prejudicial behaviors and traditions over careers spanning 30, 40, or even 50 years.

The fire service is often characterized by the saying “one hundred years of tradition unhindered by progress.” In many ways, this is a firefighting truism. Many customs grew out of the manner in which yesteryear’s firefighters fought fire. Many traditions arose out of necessity and survival. Understanding and following fire service traditions is important because it reminds firefighters of their purpose, their responsibilities, and their proud heritage from brothers long past. While I firmly support many firefighting traditions, there are some traditions I would not miss. It pains me that

the fire service continues to lose over 100 firefighters annually in the line-of-duty; we also needlessly injure many more. The inquisitive nature in me simply asks, “Why?” It is with this simple question in mind that I approached this intellectual journey called a thesis.

For many years, I have been a complacent member of the common heritage of firefighters. I have been cognizant of the fire service’s many traditions, but I never sought an in-depth answer to the question “Why?” or sought to understand why current organizational leaders have not effectively instituted changes to better meet the needs of contemporary society and their organizations. This master’s thesis has provided me with an opportunity to conduct an in-depth exploration into fire service culture, to examine the intellectual and historical foundations of leadership and culture, to explore the psychological factors that constrain and perpetuate behaviors, and to develop some strategies that I might apply as an individual, and as a leader, to increase my effectiveness as a battalion chief within the Seattle Fire Department. It is also my hope that other fire service leaders might gain some usable insight from my foray into fire service culture and thus use that insight to make their organizations safer and more effective public service agencies.

This thesis was approached for the perspective of a participant observer. I am aware of many firefighting traditions, but I never sought to qualify them or to explore their etiology. I am also very aware that firefighters are perceived differently by the public. Children and adults alike are fascinated by big red fire engines. While walking through the supermarket on-duty, I have been approached and thanked by complete strangers. When not in uniform, simply identifying myself as a firefighter frequently impacts how I am treated. Consequently, as part of my intellectual journey, I questioned if such public reactions affect the behaviors of firefighters. My goal was to discover if there were particular factors constraining the behaviors of firefighters and if fire service leaders had a chance at changing firehouse traditions and institutionalizing true behavioral changes.

After completing the body of this thesis, I have come to recognize that fire service culture is broader and more complicated than I could have ever imagined. When I began

this thesis, writing over 100 pages on the topic of fire service culture and leadership seemed absurd. But now, describing culture as “the way we doing things” falls grossly short of reality. I found that the psychological factors influencing firefighter behaviors are extremely complicated; I also found that many psychological variables present significant obstacles for individuals or organizations wanting to institute change process.

In summary, I believe that while fire service hierarchical leadership structures are necessary and effective for managing daily small-scale incidents, these same structures will never succeed at institutionalizing lasting organizational changes. Fire service cultural changes must occur organically, from bottom-up leadership. In other words, change should be cultivated by organizational leaders, not mandated by them.

## **B. PROBLEM STATEMENT**

As the shockwaves of September 11, 2001, rippled throughout our great nation; our federal government, military, and intelligence agencies alike all recognized the need for change. The National Commission on Terrorist Attacks identified much needed improvements in things like intelligence sharing, command, and control and communication (2003). From the 9/11 Commission’s report, we can infer that addressing future threats of terrorism will place similarly difficult demands upon government organizations and industry including: expanded roles within the domestic intelligence community; increased interagency cooperation and collaboration; and expanded missions to achieve increased levels of local, regional, and national preparedness.

Creating the Department of Homeland Security (DHS) was an attempt to minimize organizational challenges and fix identified deficiencies through consolidation and reorganization. Large government institutions like DHS were not alone in facing the challenges of making the United States a stronger, safer, and more prepared nation. Following 9/11, the fire service also began reviewing and searching for opportunities to improve its level of emergency preparedness, response capabilities, and interagency collaboration.

If nothing else, the past 10 years have shown us that the threats of domestic and international terrorism will persist for many years to come. An old adage suggests that

those who ignore history are doomed to repeat it. Because of this reality, many fire service leaders have accepted that their organizations now stand on the frontline in the war against terrorism. Simply put, the events of 9/11 have forced the fire service to incorporate newly recognized strategies of terrorism management and mitigation into traditional firefighting roles. The traditional firefighter archetype is no longer a simple blue-collared worker. Modern day firefighters are highly trained, technologically equipped professionals. Performance measures are no longer defined by response times and fire losses. Community preparedness, information sharing, and interagency collaboration are now part of the organizational performance vernacular.

Fire service leaders are responsible for managing terrorism-mandated shifts in organizational strategy. Their leadership challenge lies at a point of confrontation between traditional firefighting cultural roles and values and a new set of evolving post-9/11 organizational expectations. Past leaders managed small, incremental organizational shifts when challenged by changes in personnel, technology, or societal expectations. The events of 9/11, however, mandated that contemporary leaders manage major shifts in organizational strategy that are orders of magnitude greater than their predecessors ever imagined. Consequently, many traditionally accepted managing and planning models are considered outdated. They are simply not adequately suited to address the decision-making complexities imposed in a post-9/11 emergency services environment.

Strategic development models must be considered in light of society's current cognitive, cultural, and political contexts, rather than those of yesteryears' management paradigms. Teece (1985, p. 60) points out that "[a] firm's capabilities are defined very much by where it has been in the past and what it has done." While agency executives are the drivers of cultural change because they control programs, policies, and the direction of strategic change, they must still overcome an organization's previous history and existing modes of operation.

Contemporary leaders should also recognize society as an amalgamation of different individuals and groups with multiple divergent views, values, and expectations. Effective leaders must recognize that this societal amalgamation affects both individual and organizational behaviors in that a member's reasoning process is dependent upon a

pattern of shared basic assumptions developed over time by looking through the organization's cultural lenses. If the lenses are cloudy, then the organization does not have a clear context for taking action and fulfilling its mission.

Leadership may be seen as the capacity to facilitate an organization's ability to perform assigned duties, adopt new methodologies for achieving its core functions and innovating (Yukl, 1989). Unfortunately, many leaders do the opposite; they retard organizational progress, growth, and change. As leaders instill their personality and antiquated notions of autocratic leadership upon organizations, they effectively increase organizational rigidity. And, as organizational rigidity increases, leaders inadvertently suppress nonlinear reasoning and the organic organizational leadership needed to combat dynamic problems. In other words, organizations lose their ability to deal with non-traditional situations.

Traditional fire service command and control approaches to leadership work well on the fire ground, but they are frequently ineffective in the non-emergency environment because they lack creativity and flexibility. One author suggests that effective leaders should allow their organizations to establish their "own order and respond creatively to the environment" (Youngblood, 1997, p. 12). Effective leaders should empower individuals by bestowing upon them the authority to make decisions during their interactions with the public and industry. An organization's potential is dependent upon its membership "unleashing their own potential" (Youngblood, 1997, p. 14). In essence, a leader's responsibility is to create an organization where members possess a common vision, exhibit high levels of personal leadership, openly share ideas and information and where the group acts cooperatively to achieve desired goals.

Strong, powerful cultures have been repeatedly linked with organizational performance (Denison, 1985; Furnham & Gunter, 1993). Culture can empower employees and direct them along the path toward superior organization performance, or it can impede individuals from accepting change processes. Deal and Kennedy (1982, p. 5) stated, "strong culture has almost always been the driving force behind continued success." Organizational culture does not simply provide cognitive coherence and meaning for organizational members on a transitory basis. Once established, an

organization's rites, rituals, and symbolic actions are highly resistant to change (Marshall & McLean, 1985). Therefore, culture must be duly considered in the process of performance management.

For strategic change to occur, effective leaders must facilitate change in terms of an organization's resistance to change. Many factors contribute to this resistance such as engrained internal organizational rites, rituals, symbols, and external symbolic expectations fostered by a supportive society. New management paradigms must move an organization past well established social norms because organizational culture does not merely act to eliminate the cognitive dissonance of change on a transitory basis. Instead, Johnson (1990) suggests that the symbolic action of management is paramount in the strategic change process for two main reasons. First, it helps link past actions to future actions, thereby, mitigating the stress associated with change ambiguity. Second, it provides management with a starting point when attempting to facilitate organizational learning. In other words, organizational leaders must consider symbolic management in all substantive strategic change processes. By understanding the etiology of organizational resistance, effective leaders will be better equipped develop strategic change practices that are founded on a logical, systematic methodology that incorporates all dynamic components of an organization.

Acknowledging the reality of terrorism has caused a broad spectrum of agencies to propose and institute revisions that have challenged, expanded or eliminated their traditional roles. Simply put, the events of 9/11 mandated major shifts in organizational strategy across all sectors of government and industry. While all leaders are now charged with managing those shifts, creative leaders might search for opportunities to manage those shifts by leveraging increasingly complex technologies or by utilizing unconventional problem solving strategies. However, unfortunately many fire service leaders, blinded by culture and time tested traditions, have thwarted change processes by not acknowledging its existence, by failing to recognize its importance or simply resisting it because change is an arduous and exacting process.

Events like Hurricane Katrina revealed our weaknesses at both local and nation levels. As a nation, we simply failed to adequately manage and coordinate response

efforts along our nation's Gulf Coast. Our emergency resources were ill prepared and overwhelmed. One report lists multiple deficiencies including: leadership, communications, operations, and resource management (Hurricane Katrina, 2006). A retrospective Government Accountability Office (GAO) analysis on U.S. preparedness, response, and recovery systems identified similar deficiencies. The report suggested some basic elements that would better enable our country to deal with future disasters. Specifically, the report states that we need “(1) leaders and professionals with the right knowledge, skills, and experience; (2) plans and guidance that detail what needs to be done, by whom, how, and how well; and finally (3) clear criteria and expectations that are clearly communicated, well understood, and result in appropriate, coordinated actions” (Government Accountability Office [GAO], 2006, p. 96).

After action reports from less significant incidents have indicated similar shortcomings across all levels of government. In our efforts to learn from disasters, we have institutionalized the blame process through the use of public inquiries and we have failed to integrate the failures identified (Pearson, 1998). One disaster researcher reported “there are plenty of examples where lessons learned by one organization are not implemented by others in the same or related fields” (Toft & Reynolds, 1997, p. 24). Commonly reported failures included: leadership, planning, and resource management (Donahue & Tuohy, 2006). Identifying such failures surprised few, if any, fire service personnel because fire departments have a long history of making such mistakes.

Fire service leaders have historically failed to correct errors of inefficiency and mismanagement. Not only is this type of management complacency common, but it is also a recipe for disaster. Examining firefighter injury and death statistics clearly exemplifies some alarming organizational trends. Statistics show that approximately one firefighter is killed every three days within the United States; this death rate has not changed considerably since the 1980s (U.S. Fire Administration, n.d.). A firefighter is also either seriously or critically injured every six hours. Most fatalities and injuries could be prevented if due regard was given to safety (Routley & Manning, 2007).

Studying lessons learned from smaller routine incidents illustrates that fire service leaders are not making appropriate adjustments in their decision-making processes,

leadership styles, and organizational cultures. Instead, leaders remain either ignorant or grossly complacent of the causes behind organizational leadership failures and show no propensity to change their leadership approaches. Research suggests that specific organizational features may impact pernicious group behaviors like risk taking. Some features referenced include: leadership formation, division of labor, and role systems (Jones & Gerard, 1967).

Effective leaders must acknowledge that they have a definitive role in changing deleterious organizational behaviors. Research supports this reality in that, an appointed confederate leader can affect a group's shift toward more risky behavior (Wehman, Goldstein, & Williams, 1977). By examining the National Institute for Occupation Safety and Health (NIOSH) archives for fire fighter fatality investigations, we readily find examples of operational and leadership failures resulting in fire fighter deaths; some contributing factors included:

- an absence of relevant standard operating guidelines
- lack of fire fighter team continuity
- suboptimal incident command and risk management (Braddee, 2009)

And,

- ineffective incident management system at the incident
- insufficient incident management training and requirements
- insufficient tactics and training
- ineffective communications (Tarley, Bowyer, & Merinar, 2009)

These failures eerily resemble those reported at incidents of national significance and affect our ability to respond and mitigate future incidents. A knowledgeable leader with vision and determination could positively impact each of these operational deficiencies.

Historically, many attempts have been made to change dangerous firefighting behaviors. Some examples include the Everyone Goes Home program (National Fallen Firefighters Foundation, n.d. a) and the 16 Firefighter Life Safety Initiatives (National Fallen Firefighters Foundation, n.d. b) Unfortunately, actions designed to curb traditional firefighter behaviors often focus on the obvious, the overt or simple performance

modifications. For example, the fire service as a whole has made an effort to increase the awareness of fire ground dangers and deleterious behaviors; improve training and education programs; and improve safety standards and equipment. According to Crawford, “Yet one contributing cause to some line-of-duty deaths may be getting overlooked. It involves the psychological properties that perpetuate a cultural belief that firefighters have a duty to die” (2007). Other fire service sources repeat this sentiment by stating, “[f]irefighters are prepared to risk and, if necessary, lose their own lives to accomplish their mission” (Routley & Manning, 2007, p. 6). This thesis will examine the etiology and social implications of this organizational mentality.

Evaluating groups over time is problematic because groups tend to change with time. As time passes, groups accumulate knowledge and experience as to what worked and what did not. This history may either solidify group processes or cause changes. Change may be perceived in many different ways: some changes may occur slowly and systematically, while other changes may occur dramatically; some changes may originate from within the organization, while other changes may be caused by external forces; changes may be seen as reactionary, regressive, or progressive. While the variables of time may change, residual influences will continually impact group dynamics as time passes. Understanding historically significant group variables is critical in understanding how groups may react to future changes.

Because of past service wide deficiencies, a group of progressive fire service leaders formally addressed firefighter life safety issues during the 2004 Firefighter Life Safety Summit (FLSS). They developed 16 safety initiatives aimed at reducing firefighter deaths and injuries. The first initiative states that the fire service needs to “define and advocate the need for a cultural change within the fire service relating to safety; incorporating leadership, management, supervision, accountability and personal responsibility” (National Fallen Firefighters Foundation, 2004c, p. 4). Simply put, members of the FLSS recognized an absence of leadership from the fire service safety discourse. However, like many other fire service initiatives, they characteristically failed to provide further definitive guidance.

Leadership guidance and decision-making processes within the American fire service have been foreordained by years of tradition. Like all government agencies and large businesses, fire departments face challenges such as incongruent leadership, organizational values, principals, and ideals. Unfortunately, these conflicts impede organizational change, progress, and performance. Understanding that a suboptimal organizational culture exists is the first step toward changing an organization.

Fire departments across America have long and storied histories shaped by both inspiring successes and tragic losses. This history has resulted in a strong, almost palpable, organizational culture. Fire service definitions and expectations of leadership often represent nothing more than years of traditions passed down from generation to generation. Cultural indoctrination is the norm, not the exception. The indoctrination process often occurs in complicated, dysfunctional environments where young firefighters and future leaders are impacted by internal power struggles and conflicting external political agendas. Many line officers have advanced through the ranks by embracing well-established cultural and organizational norms. Firefighters are promoted by accepting existing leadership doctrines, not by challenging or questioning their merits or authority.

Fire service organizations have traditionally relied upon promotional tests as the foundation for their officer training and development. Succession planning programs are almost nonexistent. Training programs are often prescriptive and only designed to meet vertical standards. Basic leadership education is absent; when it is present, it is often conducted by ill-trained instructors or through the teaching of outdated concepts (Sargent, 2006). In the absence of fire department executives shaping and defining organizational culture, leadership at all levels simply becomes a byproduct of existing fire service culture and its role of maintaining the status quo. Consequently, poor executive leadership transcends organizational hierarchies and perpetuates poor leadership and leadership development across all organizational levels.

The skills of senior managers are but one component of an organization's success. Successful organizations develop self-perpetuating learning environments and establish strong foundations from which to build upon. Placing the human element as a central

tenet within a leader's decision-making paradigm is vital to their success. Senior managers are transitory while organizations and the individuals they represent persist over time. Individual executive leadership qualities are important, but meeting organizational goals and community expectations should be recognized as a dependent characteristic of individuals comprising the organization.

While firefighters may be well served by strong traditions and recognize their effects around fire stations and on the fire ground, they may not recognize the cultural impediments hampering their ability to meet modern professional challenges and expectations. Successful fire departments must meet the expectations of the communities they serve during times of relative normalcy or during disasters; they must continually change and adapt to their environment in order to maintain their competitive advantage within the governmental public safety arena. They must invest time and resources into developing a motivated workforce that is committed to learning across all organizational levels. Leaders must remove barriers to learning such as cultural rigidity, ineffective communication and the isomorphic properties of near misses (Elliott, Smith, & McGuinness, 2000). Unfortunately, where successful organizations have recognized that effective leadership is only possible by removing such barriers, the fire service has not. Consequently, poor executive leadership transcends organizational hierarchies and perpetuates poor leadership and leadership development across all organizational levels.

The core business of American fire departments is typically seen as firefighting and emergency medical services. However, since the tragic events of September 11, 2001, it has become readily apparent that fire departments are more than our nation's primary first responder agencies. Firefighters respond to natural disasters and the devastating effects of terrorist attacks; they have become active participants on America's frontline in the battle against terrorism. In this new role, they have struggled to shoulder new responsibilities and find direction in our nation's dynamic homeland security environment.

Future fire service homeland security roles include: collaboration across agencies from public health to police departments and the intelligence community; understanding local, state, and national strategies and policy complexities; and a new mission paradigm

that fundamentally supports preparedness, prevention, response, and recovery activities (Cloud, 2008). If the fire service has failed in its primary role as local first responders to mitigate simple, small-scale emergencies safely, it is doubtful that we can reasonably succeed in effectively mitigating large scale, highly complex incidents nor fulfilling our expanded roles in the homeland security domain.

In summary, fire service history is replete with significant incidents defined by property loss, human tragedy and organizational ineffectiveness. A comprehensive isomorphic examination of historically significant events might suggest that many of the fire service's most inauspicious moments are characterized by similar, repeated organizational and system failures. Research has suggested that first responders can readily predict organizational problems because "too often their predictions are borne out in practice" (Donahue & Tuohy, 2006, p. 1). One might then conclude that fire service culture is typified by a failure to learn and change. A corollary of this statement might be that fire service leaders exhibit a significant degree of cultural rigidity in their management practices.

In the next section, this author will accentuate poor management by exemplifying how fire service leaders have shown no propensity to learn from past mistakes. The problem is not a dearth of firefighting knowledge; it is a failure to comprehend the complexities of modern motivational, leadership, and identity theories. The unfortunate byproduct of this failure is that organizational leaders expect to create dynamic organizations with effective response capabilities while using outdated hierarchical management constructs. In other words, we must acknowledge that creating effective, dynamic organizations is doubtful at best. The principal subject of this thesis then is to explore why the fire service maintains its extreme cultural rigidity and how leaders might remove, change, or influence fire service culture to support positive behavioral changes. To be successful, changes within time-honored organizations must involve transforming traditional leaders and their notions of leadership roles and responsibilities (Ashkenas, Ulrich, Jick, & Kerr, 2002).

### **C. HYPOTHESES**

A linkage exists between fire service culture, outdated leadership styles, and deleterious organizational tendencies. Current leaders, and their autocratic, non-communicative leadership styles, are a product of an ingrained organizational culture, a culture where leadership visions, values and expectations are not shared. It is also a culture that examines life's hard lessons in isolation. The fire service continues to kill firefighters at an alarming rate (TriData Corporation, 2002), and firefighters are still dying at an alarming rate despite advance in technology and personal protective equipment. Deaths are often the result of similar contributing factors (Merinar, Bowyer, Tarley, & Jackson, 2009; Moore-Merrel, McDonald, Zhou, Fisher, & Moore, 2006; Tarley, Bowyer, & Merinar, 2009). In fact, Moore-Merrel et al. (2006) attributed approximately one-half of all firefighter line-of-duty deaths to factors that are under the direct control of firefighters or chief officers. The fire service is not unique in this sense. Whether it is a small, localized incident or a regional disaster, the same systemic weaknesses and failures continue to exist. Numerous authors have documented a failure to learn and change within organizations (Bellavita, 2007; Donahue & Tuohy, 2006; U.S. House of Representatives, 2006).

Crisis management literature is replete with barriers to learning including: rigidity of core beliefs, values and assumptions, and ineffective communication (Elliott et al., 2000). When these traits are present in senior managers, they often contribute to the potential for crises within organizations (Mitroff, Pauchant, Finney, & Pearson, 1989); they also act as inhibitors to organizational learning (Elliott et al., 2000). This author believes that learning and progress within the fire service begins at the level of the line firefighter. When senior managers exclude firefighters from the decision-making process, they stifle organizational learning and progress because firefighters resist altering their core beliefs, values, and assumptions without sufficient understanding and justification. Leaders must identify and address stakeholder interests for change to be meaningful and lasting.

Behavioral patterns are dictated by shared cultural norms that govern acceptable behavior. People make decisions and act in particular ways "because that's the way it's

always been done.” In the fire service, leaders often rely upon simple solutions to complex problems; they fail to communicate. Not only do they ignore the value of strategic planning, they fail to recognize the isomorphic properties of past incidents and near misses. Unfortunately, post incident reports are replete with such organizational failures and failures to implement lessons learned. Only with appropriate foresight might we actively remove or influence cultural artifacts that contribute to such parlous organizational behaviors like isomorphic line-of-duty deaths.

Firefighters exhibit static behaviors for three reasons:

1. an individual’s personal and social identity is defined by their organizational affiliation;
2. in-group affiliations motivate individuals to adopt the long-standing attitudes and behaviors of the group; and
3. in-group affiliations and, society at-large, reward individuals for maintaining a traditional firefighter personification.

Therefore, this author believes that the only realistic solution to overcoming outdated cultural norms is by capturing the inherent power and influence of an organization’s powerbrokers. The fire service’s key power brokers are senior firefighters. When a leader accurately captures and capitalizes the organizational influence of senior firefighters, institutional change is made possible because those individuals embody an organization’s core belief systems and they are the main perpetrators of organizational knowledge.

In essence, this author believes organizational culture is responsible for the consistently pernicious behaviors seen across a wide network of individuals who define the U.S. fire service. Leaders must recognize the fire service as a multi-leveled society composed of individuals who belong to intimately interrelated groups. Regrettably, the strong relational bonds firefighter possess tend resist the external forces of change. This thesis will examine some of those relational bonds. While traditional leadership theories focus on the hierarchical relationships within organizations, they fail to recognize the emotional benefits provided by in-group affiliations and how society at-large rewards individuals for maintaining a traditional firefighter personification. Later in this document, this author will explore some of the psychological variables influencing

firefighters. It is these group relationship factors organizational leaders must address before they can implement successful change strategies; it is these factors this thesis will examine.

#### **D. ARGUMENTS**

Fire service leaders operate in a world that should be recognized as increasingly complex and dynamic. Domestic threats to large population bases have never been more real. While attempting to maintain the public's expectations of normality, public safety employees are expected to manage both large and small-scale incidents alike. In this endeavor, one of the most important skills any organizational leader should seek to master is the concepts and practices of leadership. Unfortunately, understanding and applying the concepts of effective leadership are difficult and require significant effort. In the fire service, managing change is exceedingly difficult due to the nature of the fire service's work, the intense public scrutiny received while performing this work, and a particular and identifiable organizational culture of the members carrying out this work.

Change management is not a new leadership dilemma in government agencies; it is present at multiple governmental levels. At a local level, fire service organizations have repeatedly attempted to use after action reports as a means to qualify organizational deficiencies and validate necessary change strategies. At a national level, in an attempt to provide our nation with a unified path to domestic security and preparedness following the events of 9/11, Congress vested the Department of Homeland Security with responsibilities such as leading and managing change, planning change, initiating change, and facilitating change. And, internationally, in an attempt to better define organizational shortcomings, reports out of the U.K. identified organizational culture, failure of leadership, and a failure to embrace change as significant impediments to modernization (Bain, Lyons, & Young, 2002; HM Fire Service Inspectorate, 1999). One report stated, "[t]he complexity of the subjects of leadership, management and culture (and they are all interlinked) prevents a quick fix solution" (HM Fire Service Inspectorate, 2001, p. 3). By

subjectively evaluating these differing perspectives as related elements, I believe that institutionalizing change should be acknowledged as one of the toughest challenges contemporary leaders might face.

The demands of large scale-incidents frequently transcend the capabilities of local resources. To mitigate large-scale incidents effectively, leaders must coordinate the activities of many individuals representing a multitude of different agencies and interests. Groups of people working together in a coordinated fashion have a much better chance of producing a beneficial outcome than a number of individuals working independently. Promoting community resilience, consequently, becomes a function of integrating resources into unified, cohesive teams. Unfortunately, the same factors that promote team cohesiveness also promote team resilience.

Multiple factors contribute to both team development and team cohesion; significant factors may include an organization's social framework and the concept of social identity (Bettenhausen, 1991). Therefore, understanding the variables affecting group dynamics is necessary when attempting to build strong, effective, and cohesive teams or when attempting to change how these teams operate.

Developing a coherent understanding of the concepts surrounding social identity theory (SIT) must be recognized an essential step in the team building process. With an understanding of SIT, leaders may be able to: understand how group membership influences group cohesion and resilience; understand how organizational culture affects interpersonal relations and group membership; and understand how contextual factors, like institutional policies and practices are impacted by tradition. Consequently, I argue that by developing a thorough understanding of fire service culture and the elements that compose it, leaders might begin to chip away or modify those factors that inhibit change.

Granovetter introduced a concept called social embeddedness to help explain the system of social relationships within an organization (1985). He suggested, "actors do not behave or decide as atoms outside a larger social context. Their attempts at purposive

action are instead embedded in concrete, ongoing systems of social relations” (Granovetter, 1985, p. 487). Johnson (1990) noted that the problems of managing major change needs to be

explained and considered, not so much in terms of traditional rational planning... but in terms of the cognitive, cultural and political context and constraints in organizations... and also in terms of organizational symbols and symbolic action. (Johnson, 1990, p. 183)

These research perspectives suggest that multiple factors impact an organization’s underlying social system and function to resist change by maintaining its existing social cognitive paradigm. Therefore, I also argue that leaders must understand the numerous elements that act to strengthen and maintain the existing social cognitive paradigm. In the case of firefighters, we might see how the public, the media and firefighters themselves all act in concert to socially maintain the existing fire service culture.

Finally, I argue that fire service leaders must recognize that organizational and social factors have significant contributory effects on the outcome of disasters (Toft & Reynolds, 1997). Only by understanding firefighter subjectivities and, operating within the frameworks established by those subjectivities, might fire service leaders be able to better understand and modify the organizational hegemony that characterizes the U.S. fire service. Changing traditional fire service roles will require new ways of thinking, new management approaches, and the development of new interpersonal skill sets. Fire service leaders must find new methods to engage their personnel in the process of change before true learning can begin.

## **E. RESEARCH QUESTIONS**

Organizational change should be seen as a series of actions that create new processes, standards, or methods of doing business; change demands leadership. Successful organizational transformations begin when leaders comprehend and remove the obstacles of change and learn from past mistakes. This thesis seeks to understand the inconspicuous cultural rules that govern the expanded roles and responsibilities of firefighting organizations within the modern homeland security environment. Only after

mapping the relationships between firefighters, society, and the inherent cultural standards that limit organizational change will it become apparent the path fire service leaders must take when attempting facilitate change.

Therefore, the following questions will be addressed, as a means to establish a map, which leaders may use to help facilitate organizational change:

1. Which defining individual and group qualities and characteristics are attributed to fire service culture and leadership?
2. How do firefighters and society perpetuate fire service culture?
3. How does fire service culture impact organizational performance and effective leadership?
4. Which cultural factors inhibit fire service leaders from implementing corrective measures to overcome lessons not learned?

#### **F. SIGNIFICANCE OF RESEARCH**

There is little data linking behavior to culture within the fire service. By identifying the etiology behind the fire service's cultural rigidity, future leaders might use this information to devise strategies to alter some pernicious behaviors that result in injuries, deaths, organizational ineffectiveness, and the inability to meet organizational expectations.

## **II. METHODOLOGY**

### **A. METHODOLOGY**

This thesis will conduct a case study analysis of the U.S. fire service in an attempt to define the complex nature and behavioral elements of firefighters that characterize culture, limit the service's performance potential, and inhibit organizational leaders from instituting change processes. In a search for meaning and understanding about human interactions and relationships within the fire service, this researcher will focus on ordinary firefighters and the situations they encounter. My underlying premise is that the solutions to these complex cultural problems will only emerge after developing a thorough, well-informed understanding of the factors that shape and guide a firefighter's life within the fire service.

The research methodology utilized will be a qualitative multifaceted approach combining elements of grounded theory and total participant observation. Grounded theory will be a guiding research methodology in that; it is an accepted process to explain problematic behavior that "both laymen and sociologists can readily see how its predictions and explanations fit the reality of the situation" (Glaser & Strauss, 1967, p. 98). The grounded theory process is an evolutionary one that takes form as the research progresses.

This approach will serve to focus on an interpretive understanding of culture as a phenomenon rather than a more precisely defined analytical process where measurements are taken of each cultural component. When quantitative research would categorize culture as a simple analytical construct, this thesis will qualitatively focus on the essence of culture and treat it as a social phenomenon.

Specifically, this thesis explores fire service leadership and culture by using a four-pronged, multifaceted approach including:

1. Identifying and reviewing literature on leadership and fire service culture.
2. Categorizing elements of culture by correlating them with existing themes from the literature.

3. Examining societal imagery and expectations that perpetuate fire service culture.
4. Determining which factors inhibit organizational change by comparing the socially defined cultural expectations with contemporary leadership theory.

This general research approach assumes that when examining and categorizing relevant literary documents, each author's perspective represents a context bound account of individual behaviors and organization culture. Being a total participant observer has allowed me to evaluate and categorized collected data based upon my personal observations, experiences, and interpretations from 20-plus years as a professional firefighter in three different firefighting organizations.

## **B. SAMPLE**

The social environment constructed within every firehouse across the U.S. is dependent upon the people and situations present at any particular moment in time. When attempting to describe such an environment, a logical approach would be to describe or explain it from an insider's perspective, that being, from the point-of-view of those involved. Any data gathered from such an environment is then relative to those who documented their personal experiences and perspectives. Consequently, this data set represents a qualitative interpretation of someone's social reality. It is qualitative in that it captures the quality of an individual's situational point-of-view, understanding, definition, or denotation.

Valuing an insider's perspective as a reliable source of information, this thesis will attempt to define the qualities and characteristics attributed to fire service culture by examining fire service specific literary sources such as: articles in professional journals, books documenting firefighters' life-histories, and other books generally chronicling firehouse life. The broad spectrum of available literature should paint a picture of how people live, their beliefs, attitudes, and perceptions by examining existing relationships between individuals, their institutions, and their communities.

### **C. DATA COLLECTION**

A literature survey was conducted in an attempt to define the characteristics and qualities of fire service cultural. Three online databases were searched for professional journal articles: [www.fireengineering.com](http://www.fireengineering.com), [www.firehouse.com](http://www.firehouse.com), and [www.firechief.com](http://www.firechief.com). In addition, a general Google search was also conducted. All databases were searched using the following key words: culture, tradition, traits, leadership, and various derivations also involving the words firefighter or firefighting. Amazon.com was utilized to select a small sample of books about firefighters by using the key word “firefighter.” The selected literary sources were examined for common themes that give a representative interpretation of fire service culture.

Once a working perspective of firehouse culture was developed, another Google search was conducted for firefighter related imagery, news stories, and popular television programs. The key words firefighter, hero, 9/11, culture, and tradition were used by themselves and in combination with other search terms. Finally, a general Google search was conducted for firefighter clothing. This search was conducted based upon personal knowledge and experience as an “observer participant.” The intent of this search was to examine how the defined cultural characteristics of this thesis coincided with the cultural characterizations in firefighter clothing, which firefighters wear as an outward expression of themselves and their beliefs.

### **D. DATA ANALYSIS**

A process called isomorphism will be utilized when conducting this analysis. Isomorphic learning is helpful when analyzing past incidents and situations. Organizational isomorphism simply “refers to occasions on which organizations or their subunits, whether engaged in disparate enterprises or not, exhibit similar patterns of behaviour” (Toft & Reynolds, 1997, p. 57). The goal of this process is to corroborate this author’s research findings by triangulating perspectives, behaviors, and outcomes from multiple data sources.

By combining and analyzing pertinent cultural documents and personal observations, this author hopes to generate a relevant cultural construct that accurately

captures the social and psychological dynamics of fire service culture from an insider's perspective. If specific cultural traits materialize that suggest a level of cultural rigidity within the U.S. fire service, I will examine them from a psychological perspective founded in social identity theory (SIT).

Tajfel and Turner (1979) originally proposed SIT in 1979. As a compilation of different psychological theories, SIT was developed to help explain the psychological basis of intergroup discrimination. It has become a way to explain in-group behavior. Generally, it asserts that as individuals identify themselves with a social group; they adopt a shared attitude where they are identified as "we," rather than "I." Consequently, different social and situational contexts may shape individual behaviors based upon group membership.

By using SIT as a basis for analyzing firefighters' actions, predictions may be made about what behaviors prevent organizational learning. Consequently, a template may be developed for implementing corrective educational measures to overcome organizationally based cultural rigidity. Such a template would allow current leaders to actively remove or influence specific cultural artifacts that have contributed to past individual and organizational parlous behaviors.

### **III. LITERATURE REVIEW**

#### **A. GROUP CONCEPTUALIZATIONS**

Groups are an integral part of society and a frequent topic of discussion within academia. For many years, psychologists, sociologists, and cultural anthropologists have studied groups in society. Although social science researchers have slightly different levels of analysis, subjects such as motives, institutions, cultural behaviors, and social relations are frequently examined across all disciplines. Because of these varying perspectives, we must recognize that groups take many forms. For example, we might recognize groups of teenagers shopping at the mall or a college volleyball team traveling in the airport. At the office, a group of coworkers may spontaneously organize and go out to lunch together. As a condominium owner, one might be part of a homeowners association. Groups may be small like a couple of old friends or large like a metropolitan fire department. The point is this, groups are a ubiquitous part of humanity and interact with us in our everyday lives. Not only are they systems that help us create and organize our relationships with others, they define our place within society.

Realizing the ubiquitous nature of groups, many researchers have attempted to explain or define groups. Early researchers, like Freud, looked at groups as a means to explain social behaviors within society. As a psychologist, Freud's unit of analysis was the individual. Consequently, Freud bestowed undue levels of deference upon individuals while minimizing the group's significance. For example, some of Freud's research examined leadership behaviors within groups (quoted in Taylor & Moghaddam, 1994). While this research differentiated leaders from followers and focused on leadership motivations and behaviors, it failed to acknowledge the development of similar behaviors within leaderless groups. Leaderless groups were classified by Freud as sociological units until they developed a recognizable leader with whom the group could identify with, at which point, the group became a psychological group. The group identification provided by leadership linked the leader and follower together; it provided an emotional bond that tied members together by incorporating shared ideas or attitudes into their personality or ego. Incorporating these variables, Freud had a very complex

definition of a group. He defined it as “a number of individuals who have put one and the same object in place of their ego ideal and have subsequently identified themselves with one another in their ego (Taylor & Moghaddam, 1994, p. 20).<sup>1</sup>

From a sociological perspective, groups may be analyzed in terms of their social structure or relationship. For example, Collins (1988) emphasized the notion of social control as a lens through which groups could be viewed. While groups may take many unique forms, they nonetheless share many common properties that socially link their members together like team affiliations. Surveying sociological findings, Sherif (1954) summarized some group characteristics including: shared motives, behaviors moderated by group interaction, formalized group structure, and sets of regulating group norms. Sherif also offered a lengthy and complex group definition that incorporated many of the aforementioned group characteristics (1966). A shorter, and simpler, definition provided by Forsyth (2006) adequately summarizes the sociological perspective by focusing on group’s basic gregarious relationships. He defined a group “as *two or more individuals who are connected to one another by social relationships*” (Forsyth, 2006, p. 3). This definition focuses on collections of individuals who interact with one another on a more formal basis. Forsyth, consequently, recognized that several people casually working together in close proximity to each other, on unrelated tasks, are not classified as a group. Only when aggregations of people begin to share a common purpose can a primitive group be acknowledged (Forsyth, 2006).

Other definitions have taken a more structural approach to defining groups. By building upon the notion of a simple social relationships and concentrating on societal expectations, Robertson defined a group as a having “a number of persons whose statuses and roles are interrelated” (1987, p. 92). From this definition, we may suppose that expectations governed by individuals’ statuses and roles may guide group interactions by providing cognitive cues on how to behave in different situations. People must cognitively apply a social hierarchy that moderates their social behaviors. Commensurate with the notion of hierarchies is the topic of power in that power is an integral component

---

<sup>1</sup> Taylor and Moghaddam (1994) are quoting Freud.

of formalized hierarchies. Therefore, whether we talk about teenagers or a volleyball team, Robertson's (1987) definition proposes that groups are joined by a common purpose, share complex social obligations, and are moderated by some form of power.

The importance and existence of group standards is well documented. People conform to group norms in order to maintain control of their environment and because of a need to feel connected. Group consensus tells individuals something about reality. According to Cartwright and Zander, "Membership in a group determines for an individual many of the things he will see, think about, learn and do" (1960, p. 167). Selznick (1952) stressed that organizations have the propensity to control and influence the behavior of group members. Conformity allows individuals to attain a positive and valued social identity and gain respect from others. People often adopt the opinion of other group members through the development of social norms (Smith & Mackie, 2000). In a classic study of group decision-making, Sherif (1936) showed that when individuals experienced some situational or decisional ambiguity, they are almost completely dependent upon other group members for making the decision. Similarly, Asch (1955) demonstrated the power of group conformity on perception. In Asch's studies, individuals frequently conceded to the group choice even when their choice was clearly erroneous (1955).

By analyzing the theoretical works of social scientists, some fairly safe generalizations may be drawn about groups. Both anachronistic and contemporary researchers distinguish groups created by formal social affiliations or interpersonal connections from those identified by simple aggregation. As sentient beings, our ability to identify different group characteristics makes us socially functional within society. While groups may express distinctive tendencies and characteristics, they nonetheless share many common properties. Research indicates that within groups, members are tied together by emotional bonds when they incorporate shared ideals or attitudes into their daily lives. Norms are solidified as individuals internalize specific group roles and responsibilities. By assuming pre-defined roles, individuals also establish distinct identities that are closely linked to their group norms.

## **B. GROUP COHESIVENESS**

The power of a group to control its members is a function of group dynamics called cohesiveness. As group members develop emotional bonds with each other, both group cohesiveness and member satisfaction increase. Personal satisfaction may increase to the point that personal needs are sometimes best served by meeting group needs. When this occurs, social pressures may drive individual behaviors towards exaggerated levels of group conformity (Cartwright & Zander, 1960).

Research suggests positive links between sources of cohesion and types of behavior (McCauley, 1998). For example, threats are a particularly powerful source of cohesiveness when a group's consensus predates the shared conflict (Stein, 1976). Pollock (2003) suggests that developing cohesiveness is an effective method of promoting group resilience. We might see this reality reflected in the feelings of patriotism that were common after 9/11. Increased group cohesion also positively correlates with the acceptance of group norms, conformity, and peer pressure when members challenge expected norms (Forsyth, 2006). High cohesiveness levels may also negatively affect group members. For example, strong group affiliations experienced during crisis states might reinforce a group's outdated or illconcieved assumptions and rationalizations (Pauchant & Mitroff, 1992).

## **C. GROUP BEHAVIORS**

Groups exhibit consistent patterns when accomplishing tasks and interacting with outside stakeholders (Gersick, 1988). This realization is not new to reasearchers. They have acknowledged and studied the existance of patterned behaviors for many years. As far back as 1940, researchers recogined that habitual activities are often taken without consciously considering alternative decisions (Stene, 1940). In groups, repeated behaviors easily become habitual routines; they are a fact of life; they develop quickly, and they are hard to change.

Gersick & Hackman (1990) examined habitual routines in groups to understand how groups become either functional or dysfunctional. They believe that habitual routines "exist when a group repeatedly exhibits a functionally similar pattern of

behavior... without explicitly selecting it over alternative ways of behaving” (Gersick & Hackman, 1990, p. 69). Another forward looking explanation states, “[h]abitualization further implies that the action in question may be performed again in the future in the same manner” (Berger & Luckmann, 1966, p. 53). Thus, poor decisions made in one situation may be repeated if a similar situation and context arises.

Gersick and Hackman’s (1990) research indicated that dysfunctional groups often hold on to ineffective routines even though feedback mechanisms indicated changes were warranted. While there may be hundreds of ways of accomplishing a single task, habitualization narrows the prospective options such that, habitualization relieves individuals of the cognitive stresses and tensions inherent in a decision making process. This is extremely significant because

[t]he typifications of habitualized actions that constitute institutions are always shared ones. They are *available* to all the members of the particular social group in question, and the institution itself typifies individual actors as well as individual actions. (Berger & Luckmann, 1966, p. 54)

Habitualization essentially prevents individuals and well established groups from creating new paradigms for each incident they encounter. Unfortunately, its hard to predict whether the preexisting paradigms that group members share are going to be positive or negative.

## **D. SOCIAL IDENTITY THEORY**

### **1. Historical Background**

The people and institutions of society mold an individual’s identity. Berger and Luckman, prominent social scientists, stated, “[t]he social processes involved in both the formation and the maintenance of identity are determined by the social structure” (1966, p. 173). Group members and their identities are inevitably linked together like a network of interacting molecules. In addition, group members show a level of social cohesion; some bonds are strong and lasting, whereas, others are weak and fleeting. And, like a myriad of atoms interacting in our atmosphere, some elements may join together to form unique and easily recognizable compounds. So it is with identities. Individuals and

society interact together to create unique identities such that, the identity of a New Yorker is distinctly different from that of a California native. Therefore, identities should be recognized as a product of society.

Social identity theory originated with the early research done by Tajfel on categorization, social perception, intergroup behavior, and his desire to provide a proper social psychological framework to understand stereotyping, prejudice, and intergroup conflict (Tajfel, 1981). While Tajfel's theory focuses intently upon the social context of intergroup relations, paradoxically, it began by utilizing an experimental minimal group paradigm that sought to minimize distinguishing group characteristics by assigning individuals to study groups based upon meaningless criteria (1981). Consequently, any theorizing about identity must occur within the social framework established by the institution of the subject being studied, the methodological approach of the researcher and the interpretation of reality taken by the researcher (Berger & Luckmann, 1966).

Identity theories are but smaller abstractions within the greater realm of reality theories. Historically, social psychology has shifted its focus across many areas of research from the macro level of culture to the micro level of the individual. In the 1920s, Freud focused on the individual as a way to explain group identity and behavior. In the post-World War II (WWII) years, some researchers sought to understand the psychology of intergroup relations as it related to the atrocities of the Holocaust. The "group" was seen more as a label to describe an aggregation of interpersonal processes than a dynamic system (Hornsey, 2008). Researchers, such as Kurt Lewin, greatly influenced the field of psychology from the 1930s through the 1950s as he shifted the focus toward groups, group dynamics, and organizational development (Forsyth, 2006). Lewin also made significant contributions to the field of organizational and social psychology with his studies of leadership (Bass, 1990). During the 1960s and 1970s, however, the general fields of study encompassing group psychology and group dynamics lost much of their momentum as psychologists struggled to find a unifying direction.

Since the latter part of the 1970s, the psychological community has generally seen an increased interest in-group research. The study of group process and intergroup

relations falls with the purview of many different social scientists. Research exploring the topics of social identity and social cognition has received considerable attention. Where social cognition deals with the mental processes relating to social interactions and learning from an individualistic or reductionist perspective, social identity incorporates environmental elements that might impact the self, such as history and culture. Social identity theory has significantly influenced other areas of research including: group cohesiveness (Hogg, 1992), stereotyping (Oakes, Haslam, & Turner, 1994), and prejudice (Brown, 1995).

## **2. Social Identity**

Social identity theory is currently one of the most influential theories examining group processes and intergroup relations (Hornsey, 2008). According to Stets and Burke, “Having a particular social identity means being at one with a certain group, being like others in the group, and seeing things from the group’s perspective” (2000, p. 226). It developed as a means of bridging the gap between individual and group level explanations of human behavior. In the beginning, SIT focused on how self-perceived group membership affected perceptions and stressed the contextual relationship between individuals and groups. In simpler words, the foundation of SIT resides with the consistency of a group’s perceptions and their resulting actions. By focusing on group similarities, SIT differentiated itself from role identity that tends to focus on differences in role perceptions and actions. Also, by incorporating a social focus that examined attitudes like stereotyping and prejudice, SIT differentiated itself from social cognition.

The general movements behind SIT developed out of a need to see social phenomena from a non-reductionist perspective. Hogg and Abrams stated “[t]he reason why this has happened is that social identity theory is a theory of the dynamic and generative interdependence of self-concept and intergroup relations” (1999, p. 6). While many traditional psychological theories emphasize individualism, social identity runs counter to such theories. Generally, it is a psychological approach that attempts to explain how self-perceived group membership affects social perceptions, attitudes, and intergroup relations. In other words, it deals with how people see themselves as members

on one group, in comparison to another group, and the effects of this comparison. The primary force behind these research categorizations was a desire to understand intergroup relations. Social identity theory is also more than single theory. Instead, it is a group of interrelated perspectives on social comparison, intergroup relations, psychological distinctiveness and motivation. Basically, it focuses on the relationship between social context and intergroup relations.

Henry Tajfel first introduced the concepts surrounding social identity in the 1970s with the goal of understanding an individual's self-rationalize process in social environments. A technical definition put forth by Tajfel defined social identity as "that part of an individual's self-concept which derives from his knowledge of his membership of a group (or groups) together with the value and emotional significance attached to the membership" (1978, p. 63). The theory proposes that an individual's social identity is essential in the formation of the self-concept; it also acknowledges that the self-concept is shaped, in part; by membership within a social group.

Two underlying social cognitive processes may be seen as the foundation of SIT: 1) a categorization process that helps individuals distinguish group boundaries and membership, and 2) self-enhancement or a comparison process between individuals and their salient groups in an effort to maintain self-esteem and enhance images of the self by favoring one's in-group (Hogg & Abrams, 1999). For many individuals, organizational membership helps establish their important social identity. Organizational affiliation is, therefore, construed as form of social identification in which the self is recognized or referred to in terms of organizational membership (Ashforth & Mael, 1989).

## **E. INTRODUCTION TO CULTURE**

There is an emerging train of thought among members of the homeland security community that the world is becoming more complex and uncertain. Organizations from local governments to federal agencies all realize that addressing future threats is essential for the survival and perpetuation of American ideals. Addressing future threats involves changing organizations from their current state to a desired state or to an unknown future state because today's homeland security areas of emphasis are not necessarily those of

tomorrow. Unfortunately, with this reality in mind, leaders must recognize that, “[t]he failure rate of most planned organizational change initiatives is dramatic” (Cameron & Quinn, 2006, p. 1). Any individual who becomes a member of a large well-established organization inevitably becomes a member of the broader culture embedded within the organization. Once the individual acknowledges membership, they are likely to accept the organization’s conception of reality. Kotter and Heskett (1992) reported that failing to address culture was one of the most common reasons for failing to achieve organizational change.

Elected and appointed leaders must direct public organizations through difficult times of turmoil and strife. Organizational culture is a determinant factor in the process of reforming and modernizing public agencies (Jung, Scott, Davies, Bower, Whalley, McNally, et al., 2009). Culture influences the organizational strategies progressive leaders select when implementing policies to mitigate the causes of turmoil and strife. One author suggests, “[c]ulture at the national level is more important than ever in helping us to understand intergroup conflict.” (Schein, 2004, p. xi). Consequently, identifying, understanding, and mitigating elements of culture that contribute to intergroup conflict will minimize the growing pains often associated with organizational change.

Observing what happens within organizations is a fairly easy process. Researchers can document changes through subjective empirical observations or objective numerical measurements; however, culture, as an abstract concept presents many challenges to researchers. According to Schein, “Culture is both a dynamic phenomenon that surrounds us at all times... and a set of structures, routines, rules, and norms that guide and constrain behavior” (2004, p. 1). In simpler terms, organizations tend to develop their own habits, routines, and cultures. Culture provides organizational and societal stability and security by defining how people typically react under many different situations and conditions. It can invisibly influence human behavior and interpersonal interactions without ever entering into someone’s conscious thought process.

When examining available literature on culture, it becomes readily apparent that a diverse range of perspectives (Pettigrew, 1979; Pondy, 1979) and definitions (Bower, 2003; Schein, 2004) of culture exists. The study of culture may focus on performance expectations in the business setting (Barney, 1986) or shared symbols and meanings in an anthropological setting (Smircich, 1983). However, differences in observation and interpretation result in disparities in the academic definitions and uses of culture (Morgan, 1980).

Numerous working definitions of culture are available. An informal definition offered by Marvin Bower to describe the culture or philosophy of a business might best be summarized as “the way we do things around here” (Bower, 2003). On the other hand, organizational psychologist, Edgar H. Schein, in his most recent work *Organizational Culture and Leadership*, provides a more formal and widely used definition of culture (2004). He defines culture as:

[A] pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems. (Schein, 2004, p. 17)

Schein’s definition does not contend that all organizations develop integrated cultures that characteristically define or distinguish the organization. Instead, where some organizations strongly represent their founder’s ideals and values (Cameron, 2006), others, with high employee turnover rates or limited operational histories, may not develop strong cultural bonds (Schein, 2004).

Differences in organizational longevity or group formation impact culture. It is generally assumed that an organization’s stakeholders are responsible for developing and nurturing the behavioral norms. Spontaneous interactions among groups of individuals will result in recognizable patterns of behavior. Informal leaders or dominating personalities may influence the group’s dynamics. Newly formed formal organizations may reflect the founder’s vision and expectations (Kotter & Heskett, 1992). Over time, organizational compositions change as leadership and membership change, yet the

underlying culture remains because it is an integral part of the remaining group by providing stability, meaning, and predictability (Schein, 2004).

People often think about the concepts of culture in terms of relationships, social interactions, or societal influences on behavior. From a perspective approach, culture is used in many different forms—organizational culture, culture of safety, leadership culture, and customer service culture. When looking at culture this way, we come to realize that culture is hierarchical; some cultures are better than others while others may be worse (Schein, 2004). This concept is supported by prevailing research that contends that strong business cultures improve organizational performance (Sorensen, 2002) or explain the economic success of one company over another (Denison, 1985).

The construct of culture has been increasingly linked with the study of groups and organizations (Smircich, 1983). Literary sources from academic journals, trade publications, and government reports have all addressed topics related either directly or indirectly to culture. Schein suggests that by understanding culture, we might gain a better understanding of why things happen (2004). He also recognizes that an organization's culture may have developed, in part, from the way it reacted to important incidents in the past (Schein, 1990).

Schein's suggests that significant events within the collective's past have created certain cultural expectations or norms. These norms are then culturally perpetuated by leaders indoctrinating new members into the organization through a complex socialization process (Schein, 1990). For example, business establishments such as Wal-Mart and IBM were known for strong cultures representative of their founders' value systems (Kotter & Heskett, 1992). By describing various rituals and symbols, Deal and Kennedy (2000) described a manageable path by which American companies, through their leaders and managers, could become successful through cultural modification.

As a behavioral regulator, culture becomes a factor that leaders must address when promoting organizational change. If we acknowledge that fear is often associated

with new and unexpected situations, then the creation and management of culture is the essence of effective leadership (Schein, 2004).

The stability provided by well-established cultures explains why people resist cultural shifts. Alleviating fear and anxiety associated with organizational change is an essential variable all leaders must contemplate, and overcome, when instituting constructive change processes. Before leaders attempt to create new organizational cultures, they must first understand and identify elements of culture before enacting change. Simply put, leaders must consider culture as a primary source of resistance to change (Schein, 2004).

## **F. INTRODUCTION TO LEADERSHIP**

The complexity and diversity of knowledge about leadership might be most aptly summarized by examining quotes from three of academia's mostly highly recognized authorities on leadership. Bernard Bass observed, "[t]here are almost as many different definitions of leadership as there are persons who have attempted to define the concept" (1990, p. 11). James MacGregor Burns suggests, "[l]eadership is one of the most observed and least understood phenomena on earth" (1978, p. 2). And Warren Bennis stated, "[o]f all the hazy and confounding areas in social psychology, leadership theory undoubtedly contends for the top nomination...more has been written and less known about leadership than about any other topic in the behavioural sciences" (1959, p. 259). By examining these three statements, it should become evident that understanding and defining the subject of leadership is a complicated process that many researchers have attempted to address, but none have successfully resolved.

### **1. Fire Service Leadership**

Fire service leadership literary sources are representative of the existing leadership continuum; there are extreme variances when defining leadership and numerous explanations surrounding the concepts, behaviors, and styles associated with the topic. Some sources recognize leadership as a process of influencing people to achieve a common goal and describe fundamental concepts behind leadership styles (National Fire Protection Association, 2010), while others provide comprehensive

discussions surrounding the topic and include subject areas such as organizational behavior, impacts of leadership on individual performance, and leadership as means of improving group performance (Buckman, 2006).

In general, fire service sources provide good text book definitions of leadership from traits theory to transformational leadership; however, there is little discussion about the evolution of leadership and why perspectives about leadership have changed with time. This may inhibit an firefighter's leadership potential and effectiveness if they do not seek outside sources of education and knowledge.

## **2. Early Understandings of Leadership**

Leadership principles described in modern literature are generally grouped into theoretical schools of thought. Early research developed comprehensive theoretical models and defined leadership by the functional requirements of society; research described leadership from an individualistic perspective of the "leader." This era failed to consider situational dynamics. Either research focused on the person or on the environment; it did not integrate the two concepts. Later, researchers began to incorporate different variables and definitions into their research as the breadth and complexity of leadership theory was elucidated and the shortfalls of previous theories became apparent. Later theories also represent a shift towards organizational leadership and the collective's responsibility for leading. This perspective is more consistent with current notions of society and the recognition of a global community.

## **3. Great Man and Traits Theories**

The first significant school of thought is represented by the great man theory. It suggests that the determinant cause of history is attributed to great men and their ability to direct change within society. Leadership was not a quality attributed to women. Great men were recognized as leaders who create history, guide society, and mold the masses (Popper, 2001, p. 45). Without great men, society might have taken a different path. This theory contends that leaders differ from followers by virtue of birth and fate rather than being made or developed (Bass, 1990). An old proverb best summarizes the great man theory by stating that "leaders are born, not made."

The great man theory evolved into the traits theory (Luthans, 1981) that supports the belief that leaders are differentiable and identifiable from their followers by virtue of superior qualities. It contends that superior traits allow individuals to emerge out of history to become leaders. Consequently, trait research focused on identifying and isolating personality traits of historically successful leaders. Theorists postulated that future leaders could be identified by their distinctive characteristics (Page, 1935). While a central tendency of this theory was to identify key characteristics of successful people, the theory also recognized that the absence of key traits did not preclude people from leadership potential.

A central problem with the traits approach lies in the realization that almost every leadership study identified unique traits. Traits were difficult to measure. Research showed that some traits were frequently seen in successful leaders; however, no consistent traits were identifiable that effectively predicted good leaders. Consistent with this realization, leadership scholar Ralph Stogdill (1948) published one of the most cited literature reviews examining the personal factors associated with leadership. In his landmark work, he solidified the conclusion that the possession of certain traits was not sufficient to explain successful leadership (Stogdill, 1948). Stogdill's work represents the beginning of a new era in leadership research.

#### **4. Behavioral, Situational and Contingency Theories of Leadership**

Following the era focusing on personalities and traits of leaders, researchers began examining the impact of relationships and behaviors on leadership. Researchers recognized that leadership exists as a relationship between individuals. Early in this new research era came three of the most historically important organizational leadership studies: the University of Iowa and Ohio State leadership studies and the Northern Michigan State University studies on leadership styles (Bass, 1990). The Ohio State and Michigan studies identified two factors that describe leadership behaviors: initiating structure, the way a leader organizes and defines work and consideration, or the manner in which a leader exhibits concern for group members. The Iowa studies of the late 1930s examined three leadership styles—authoritarian, democratic, and laissez faire—

and their effects on variables such as frustration and aggression. Later developments in this era include Blake and Mouton's managerial grid and McGregor's theory X and Y. These studies began a behavioral approach, rather than a leadership traits approach, when examining an individuals' behavior while acting as a groups' leader (Bass, 1990).

While behavioral approaches gave some insight into the actions of leaders, they failed to incorporate the effects of dynamic environments on leadership. No single leadership style is effective under all circumstances. The failures in previous theories subsequently led to situational and contingency theories that dominated much of the research from 1930 to 1970.

Situational and contingency theories recognized that significant environmental and social factors, beyond the leader/follower interaction, contribute to the leadership process. Performance is jointly dependent upon a leader and situational attributes. These theories are based on the notion that there is no single right way to lead. A leadership style that is effective in one situation may not be as effective in another situation. Leadership may be seen as a continuum reflecting changes in style and employee participation. Researchers supporting this theory postulated that situational factors, in conjunction with behavioral and personality factors, may predict leadership effectiveness. Two notable examples of these theories include Fiedler's contingency theory and the path-goal theory (Bass, 1990).

Both situational and contingency theories were very sophisticated relative to earlier leadership studies. One difference between these theories is in scope. Contingency theory takes a broader perspective by including qualities like leader capability. The main limitation in these theories resides in their inability to distinguish between leadership and management.

## **5. Leadership Exchange Theories**

While leadership theories up until the late 1970s were intended to improve performance through effective leadership, more recent research has examined how individual leaders can impact organizations by impacting employee commitment and risk taking (Behling & McFillen, 1996). This era represents a period of exchange between

leader and follower. Leadership theory development during this stage acknowledges “the reciprocal influence of the subordinate and the leader, and the development of their relative roles over time” (Seters & Field, 1990, p. 36).

One example from this new approach to leadership, transactional leadership, contends that leaders possess the means to help subordinates achieve organizational success or personal rewards when they appropriately meet the leader’s needs. The transactional leader understands subordinates’ wants and desires. With this understanding, followers’ actions are rewarded or punished commensurate with their level of effort and performance (Bass, 1990).

Transactional leadership theory has several limitations. First, it is an extension of contingency theory in that the leader/follower relationships are contingent upon transactions and mutual understandings between the two parties. This relationship means that transactional leadership falls more toward the management end of the leadership/management continuum. Second, this theory resides in the belief that workers are solely motivated by rewards and punishments. It fails to recognize possible social or emotional motivators; however, this same failure also provides a level of validity from a behaviorism perspective. Therefore, this theory still has strong supporters among contemporary researcher (Seters & Field, 1990).

A contrasting theory, transformational leadership, is currently a very popular and dominant leadership exchange theory today. The popularity of transformational leadership may, in part, stem from the belief that it positively affects followers’ behaviors, attitudes, and job satisfaction. The theory contends that there is an equitable exchange between the leader’s actions and the follower’s intellectual development or the understanding of his or her personal leadership role within the organization (Bass, 1990).

The founding principle behind transformational leadership resides in the leader’s development of an organizational vision. The leader relates and sells a vision of the future that the follower can personalize and support (Bass, 1990). By gaining

organizational support for his or her vision, a leader builds enthusiasm and energy within the organization; leaders motivate others to exceed traditional expectations and seek greater personal achievements.

Transformational leadership relies upon intrinsic, rather than extrinsic, behavioral motivators. Followers willingly support leaders' goals instead of reluctantly complying with their directives. This approach provides positive organizational benefits in that both parties are linked by common principles and values. Its greatest benefit may reside in followers that identify themselves with their leaders. Its greatest weakness may originate in leaders who mistake emotion for truth. For example, enthusiastic leaders are always capable of leading willing followers down the wrong path.

There exists a school of thought within leadership research that focuses upon organizational culture. Research within this school of thought treats leadership as a function of the organization, as a whole, rather than a byproduct of the leader/follower relationship. Examples of this philosophy include the eight attributes of excellent companies offered by Peters and Waterman (1982) and theory Z by Ouchi (1981).

These cultural leadership philosophies measure organizational success by production quality rather than production quantity. The philosophies also imply that employees will provide organic organizational leadership when leaders afford them with the right cultural environment (Seters & Field, 1990). Executive leadership is only needed when organizational culture fails to meet company production expectations (Schein, 1990). This school of thought falls more towards the management end of the leadership spectrum. Unfortunately, reliance upon group input and group decision-making processes may inadequately meet organizational needs during rapidly changing environments.

Meta-leadership is another recently developed leadership construct. In 2005, Marcus, Dorn and Henderson popularized the principle concepts behind meta-leadership. This leadership model builds upon past theories in that it recognizes the multidimensional aspects of leadership or leadership beyond the organizational level. It promotes thinking and operating across traditional organizational and authoritative boundaries.

Meta-leaders encourage “people and organizations to extend beyond their traditional scope of interest and activity” (Marcus, Dorn, & Henderson, 2006, p. 131). For example, where Bennis and Nanus (1985) talked about aligning an organization’s internal and external environments and Nicholls (1988) discussed meta “visioning” as an extension of macro (path-finding) and micro (culture building) leadership roles in transformational leadership, the role of a meta-leader is to transcend a leader’s typical hierarchical area of influence. Meta-leadership extends beyond traditional lines of command and control. Meta-leaders seek to accomplish a greater good by utilizing not only their organization but other departments or agencies as well. Multiple groups coming together for a common good provide a force multiplier effect that meta-leaders hope to capitalize upon.

In conclusion, the literature suggests that we must recognize leadership as a complex process. The vastly different approaches to leadership theory represent the nature and understanding of the relationships between leaders and followers. What was once seen as a simple set of traits has evolved into a complex framework describing the relationships between all aspects of society.

## **G. LITERATURE SUMMARY**

The evolutionary development and understanding of leadership and culture represent a progressive shift along a changing philosophical framework. Early leadership theories focused on the individual; later theories focused upon relationships within the collective. The construct of culture has similarly been linked with the study of groups. The literature shows that different situational and contextual approaches to the topics discussed result in vastly different conceptualizations.

The literature supports a unifying belief that leadership and culture impact an organization’s stakeholders. While differences in organizational longevity or group formation may impact the formation of culture, similar defining influences have also shaped leadership theories. Leadership is recognized as a process of providing guidance

within a group; culture represents the sense-making process within the group as exemplified through differences in definitions, performance expectations, or shared symbols.

Leadership and culture share a historically enigmatic relationship within the fire service. The information presented thus far should help to establish a link between the requisite knowledge base of leaders attempting to guide organizations and the potential obstacles or resistance to change presented by organizational culture. This literature review should also elucidate how difficult change is at the personal, social cognitive level of individuals. This author believes that leading firefighters through organizational trials presented by contemporary society should be seen as a leadership challenge involving many group members, not a single organizational leader, because meaningful leadership needs to be a group endeavor.

In the next section, this author will expound upon the intricacies of fire service culture. The depth, breadth of significance of firehouse culture should become apparent to you, the reader, as we explore the social foundation of firefighters. The American fire service has had hundreds of years to solidify the way we do things. Accordingly, it must be recognized that the ways of the fire service are not new. Firehouse traditions are far older than the fire engines and the firefighters staffing them.

THIS PAGE INTENTIONALLY LEFT BLANK

## **IV. FIREHOUSE CULTURE**

### **A. INTRODUCTION**

Typical organizational responses are developed and solidified by the shared histories of organizational members. Current literature seems to support this assertion. Berger (1996) suggests that modern institutional conceptualizations must be viewed in the light of their historical development. Carley (1991) suggests a group's rigidity sometimes correlates with its organizational stability or longevity. In other words, organizational predictability may be seen as a function of organizational history.

Understanding the fire service's inherent social systems is the first step a leader must take when attempting to make organizational changes. Individuals, groups, and organizations consciously choose their coping strategies when faced with environmental hazards and other dangers. In a similar manner, individuals also chose different coping mechanisms when facing unfamiliar changes. Choices originate from each member's endemic knowledge and the observed behaviors of others. As Carley (1991) relates it, both choice and behavior are functions of knowledge. So, applying this conclusion to real-world events should allow leaders to draw several conclusions:

- 1) individuals make decisions that are "based on limited knowledge,"
- 2) decisions are bounded by the "constraints" set by their respective social systems (Mileti, 1999, p. 22) and
- 3) leadership paradigms should be recognized as small component parts of larger social control systems (Berger, 1966).

Consequently, only by possessing an in-depth understanding of a group's existing social structure, and its origins, might leaders take specific actions to modify longstanding pernicious traditions and behaviors. With this in mind, this section seeks to help elucidate the social system this author calls "Firehouse Culture."

## **B. A HEGEMONIC MASCULINE CULTURE**

Fire service culture may best be known for its blatantly hegemonic masculine culture. Many authors have examined this reality from different points-of-view both nationally (Bendick, 2008; Chetkovich, 1997; Fire 20/20, 2007) and internationally (Baigent, 2001; HM Fire Service Inspectorate, 1999). Data shows that uniformed women still represent less than 0.25 percent of all firefighters in the world's largest fire department, Fire Department of New York (FDNY), and approximately 3.7 percent of the U.S. fire service workforce (Bendick, 2008). In 1998, women made up less than one percent of the U.K.'s whole and part-time workforce (HM Fire Service Inspectorate, 1999). Research in both countries have demonstrated problems originating from different forms of gener-based discrimination.

Due to the significant quantity of research on gender in the fire service, I will simply acknowledge that a hegemonic masculine culture exists. No further attempts will be made to elucidate the cultural components contributing to this gender disparity; however, research has shown that predominantly male workforces significantly influence workplace cultures in numerous ways. One of the most important factors may be seen as the informal hierarchy established within the workplace where senior firefighters mentor new recruits regarding the knowledge and skills of firefighting. It is, therefore, applicable to expand upon this information and its relationship to the fire service.

Hegemonic work cultures have been shown to influence workplace safety in multiple disciplines including: mining (Eveline, 2002; Wicks, 2002), policing (Henderson, 2002), and construction (Waddick, 2002). Masculine cultures may also signify and be characterized by aggression, competitiveness, and risk taking within the workplace (Somerville, 2005). These characteristics will be explored later within this document and suggested as typifying the fire service.

Eveline (2002) demonstrated that traditional workplace practices are perpetuated through a workforce patriarchy. Her research examined how mine administrators attempted to neutralize the effects of traditional workplace cultures by recruiting individuals with no previous mining experience and that were "socially malleable,

politically open to working co-operatively, and industrially non-combative” (Eveline & Booth, 2002, p. 561). The new recruits constituted approximately 70 percent of the overall workforce and all the mine’s “ operators;” however, approximately 30 percent of the workforce still represented skilled managers and tradespeople from the mining fraternity. These people were used to train the new recruits and manage the mine. Unfortunately, the influence of the seasoned patriarchy was sufficient to revive much of the traditional mining culture.

This information suggests a possible link between veteran male firefighters, as the fire service’s cultural flag bearers, and the persistence of an organizational culture characterized by aggression, competitiveness, and risk taking behaviors within the workplace. Consequently, by addressing the perpetuation of fire service culture today might leaders positively change the potentially deleterious firefighting behaviors of tomorrow

### **C. SENIOR FIREFIGHTERS**

Within the firehouse there is an informal hierarchy established by seniority from new rookies to seasoned veterans. Senior firefighters are the unofficial fire department power brokers and the informal historians and storytellers for legendary acts of bravery and lore. They are often called upon to help teach new recruits fundamental job skills. They are often the most experienced firefighter in regards to things like district knowledge—buildings, streets, and geographic district challenges. Their teaching roles extend beyond typical manipulative evolutions; they are the flag bearers of culture as they stabilize social behaviors through example and social reprimand.

The wagon driver is also the focal point for the spirit and esprit de corps of the company in the firehouse. As a more experienced technician, he often is the more active organizer, cook, or central source of information. (McCarl, 1985, p. 69)

Heroic leaders will frequently emerge from within the firehouse. Leadership is not granted to an individual by any formally established governing authority but, instead, the designation of leader is collectively bestowed upon an individual by his or her peers. Senior fire fighters perpetuate well-established belief systems that describe heroic

journeys taken by past members. While the accepted wisdom epitomized in stories, traditions, and cultural expectations teaches new members how to integrate into the organization functionally, these communication processes also strengthen an organization's cultural remnant and inhibit progress.

In sociology, a defined social control process creates the recognized social order as people's behavior is affected by the respect that others give or withhold from them. Social positioning is also an important aspect of fire service culture. Social systems are founded upon accepted and continuing social interactions and practices. The internally established norms help govern both organizational stability and change. A firefighter's role within his or her organization's existing social system helps determine his social identity and his hierarchical position within that system. Senior, socially accepted individuals rank high upon the ladder hierarchy while junior firefighters occupy lower rungs. Socially deviant behavior may significantly limit an individual's ability to achieve prestige or status within the system. Quite simply, those who command higher levels of prestige will gain access into more social desirable circles. And, those who own prestige can control other's actions by giving or withholding their esteem. In essence, they control the organization.

#### **D. FIREHOUSE STORIES**

Human beings reason largely by means of stories, not by mounds of data. Stories are memorable... They teach... If we are serious about ideals, values, motivation, commitment, we will pay attention to the role of stories [and] myths...

—Peters & Austin, 1986, p. 281

Storytelling is an integral part of our society. From a very young age, parents tell their children stories for various reasons: to educate, to entertain, or reinforce expected behaviors. Young children may return the favor by telling their parents outlandish tales in the hopes of influencing their attitudes or decisions. As we grow up, some storytelling may become personal. People relate stories about everyday occurrences, deeds, or ideas about the future. People may embellish the truth in order to emphasize a particular personal trait. For example, we have all heard big fish stories in one form or another.

Storytelling bridges all aspects of our society. As a result, all civilizations have developed verbal mechanisms to transmit culture, explain the world, and establish expectations from one generation to the next. A media researcher states, “Narratives are basic to culture. They help people make sense of their environments. Stories symbolize cultural values and provide cultural continuity” (Lull, 2000, p. 172). McCarl talks about the fire service as being “a work culture based on the passage of information by word of mouth” (1985, p. 102). Abstract concepts are communicated through stories in a way that allows individuals to internalize concepts for posterity. Gerbner and Gross stated that storytelling is a system by which society “makes people perceive as real and normal and right that which fits the established social order” (1976, p. 173).

People and society share a relational interdependence through storytelling. Society conducts a running discourse with us through language and symbolism. Through this ongoing discursive discussion, an individual’s subjectivities are shaped by his or her life experiences and mediated by time, place, and knowledge. Personal, intellectual and emotional growth processes, therefore, may be seen as perpetual feedback loops where personal identities and subjectivities are a product of each individual’s social environment.

World history is replete with great storytellers like Abraham Lincoln. Conversation was his weapon of persuasion. It is said that he had a significant arsenal of stories, anecdotes, and jokes at his disposal. He had an uncanny ability to tell tall tales and keep people thoroughly entertained. The President used humor as a means to alleviate the stresses of his office. As a statesman, his ability to influence people was a significant factor to his success as President; his stories had purpose. According to Phillips, “Recent work in the field of leadership confirms Lincoln’s strategy and emphasizes the role of stories as powerful motivational tools that spread loyalty, commitment, and enthusiasm” (1992, p. 158).

The fire service has also had its share of gifted orators. Retire Phoenix, Arizona Fire Chief Alan Brunacini is renowned for his storytelling. He has a casual in demeanor and a penchant for short-sleeved Hawaiian shirts. I saw him speak on several occasions. He was unbecoming for such a prominent fire service leader. When he spoke about fire

service topics, he conversed with a comfortable familiarity normally associated with friends and family rather than a professional lecturer. He epitomized the notion of a veteran fireman storyteller in that he would intersperse short stories throughout his lectures; Brunacini was a master entertainer. Each story struck a chord with his listeners and was somehow poignantly related to the topic at hand. Whether through charm, wit, or emotion, Brunacini knew how to get his desired messages across to his listeners.

Firehouse dinner table discussions are notoriously replete with storytelling. These stories provide the foundational subjectivities for both new and existing firefighters. Consequently, dinner table storylines provide the subjectivities that guide future behaviors. Ferguson (2006) elaborates about the function of firehouse stories by stating, “Firefighters have shared tales of perilous adventures and offbeat characters both to blow off steam and informally induct members into their fraternity.”

It is through daily instruction and personalization of significant events that rookie fire fighters first begin to learn their trade. Personal experiences are linked to specific situations through stories that represent both a form of entertainment and instruction. However, not all stories are based upon the safest firefighting behaviors. Speaking about new probies, one fire chief stated, “We tell them about Captain Patrick “Paddy” Brown and his legendary acts of bravery” and another firefighter who would use an apartment door “as a shield while he charged through the flames” (Salka, 2005, p. 92).

Firehouse stories give strong, repeated impressions about life in the fire station by establishing a specific type of social order or firehouse reality. This reality paints a coherent picture for the membership about what is important, what is right, and what is wrong. It is a method by which actions and expectations are legitimized and reinforced. In other words, storytelling may be seen as an effective means of maintaining social control. Stories are generally related by the more experienced firefighters and officers. These individuals can “literally shape a rookie’s perception and understanding of the work by creating an environment in which the whole company assists in the education process” (McCarl, 1985, p. 46).

For many firefighters, the fire service may be seen as a second family and the firehouse as a home away from home. According to Routley and Manning, “The fire service is viewed and sees itself as a “family” that is founded on the dedication and shared commitment of every “member” to the mission, to the organization and to each other” (2007, p. 6).

As firefighters relate verbal traditions around the kitchen, or as firefighters call it—the beanery, a form of incidental learning may take place. Ethnographic studies have shown the significance of family discussions in defining and reinforcing social expectations (Lull, 2000). In this environment, telling dramatic stories where cultural violators are vilified can help solidify role expectations within the firefighting ranks. Stories symbolically perpetuate expected social norms by communicating the price violators pay when they challenge or break the collective’s rules. Symbolic lessons demonstrate how things should occur. Values and norms are illustrated through characterizations of what is right and what is wrong. Take for example the follow excerpts from firefighter literature:

The FDNY has always used stories—and it has used them very effectively—to preserve and perpetuate its core values and mission. The moment rookies show up at their assigned firehouses for their first day on the job, they’re inducted into the culture of the department through the stories and legends told to them by the veterans. (Salka, 2005, p. 92)

And:

Rookies, fresh out of the training academy, want to fit into their new department. They watch and listen to the seasoned firefighters. Habits form, rules are slackened, and traditions are learned around the kitchen table. Before you know it, attitudes meld into the culture of the department. (Wilmoth, 2004)

Just like children learning language through normal daily communication processes, so is culture communicated to new firefighters through routine social interactions. McCarl provides another excellent example of how expectations and culture are communicated from seasoned veterans to new probationary firefighters. He

introduces his example by stating “three experienced fire fighters related to a rookie...” (McCarl, 1985, p. 54), which is then followed by some firehouse story used to illustrate a relevant bit of information.

Firehouse stories help solidify an organization’s history. Coleman suggests “[O]ften-told stories help create the culture of an organization” (2004). He further suggests that some stories are “spun, embellished, magnified and in some cases turned into outright urban legends” (Coleman, 2004).

One of the many reasons leaders need to understand organizational culture comes from some leadership scholars who stated the following: “One of the biggest mistakes leaders can make is ignoring the realities of team ground rules and the collective emotions in the group and assuming that the force of their leadership alone is enough to drive people’s behavior” (Goleman, Boyatzis, & McKee, 2002, p. 176). Therefore, while stories may be seen as a method to describe the qualities and characteristics every firefighter should embody, they may also be used to describe how firefighters should behave in the station and on the fire ground. Ferguson supports this assertion by stating that “traditional stories are relevant for reinforcing an organization’s preferred identity, encouraging people to work as a team and illustrating the characteristics of leadership” (2006).

In an interview with *Fire Chief* magazine, Chief Brunacini stated, “All new ideas get floated against the organizational idea history, the landscape that includes all the successes, failures, and war stories” (Elliott , 2001). Many firehouse stories are told about individuals and situations. Over time, these stories become incorporated into the lexicon of fire service lore. Stories should be seen as lending credibility to people and their actions. Consequently, by describing organizational successes and failures, stories provide motivation that guides future actions:

- “Stories can inspire us to strive for greatness or motivate us to acts of incredible dishonor” (Ferguson, 2006).
- “experienced fire fighters tell stories about fires taken by other companies or mistakes made” (McCarl, 1985, p. 51).
- “a number of the stories about standing watch depict extremes, like runs missed by sleeping watchmen, addresses missed” (McCarl, 1985, p. 54).

- “Why, in my day, we... (followed by a story about some unsafe fire ground activity)” (Gassway, 2005).

As new recruits gain experience and acceptance within the fire station, they become more engrossed within the firefighting tradition. Eventually, the culture, the family, the brotherhood becomes a central feature of a firefighter’s life. During this indoctrination process, stories communicate complex ideas, share knowledge, and inspire current and future behaviors. One of Chief Salka’s favorite stories is about the Maltese Cross. He believes the story “speaks to our values of brotherhood and sacrifice... the symbol and the story it tells are ever-present reminders of our mission” (Salka, 2005, p. 93). So it is with firefighting stories in general.

In summary, firehouse stories should not be seen as stand-alone cultural products. They stimulate conversations and discussions about what people expect. They become validated within the complex social environment of a fire station. Stories have the effect of shaping both an individual’s and a group’s reality. They help eliminate the uncomfortable feelings of cognitive dissonance. They are illustrative of what an ideal firefighter should look like and how they should behave. Veteran firefighters are the knowledge bearers for future generations. Through their stories, a historically accurate picture of firehouse traditions is related to new firefighters. In essence, stories provide a reference point that people can interpret and integrate into their personal and social reality.

#### **E. SYMBOLS OF PRIDE AND IDENTITY**

“A logo is something to be proud of.”  
—Lasky, 2006, p. 28

The fire service has always been a very proud profession. Not only do firefighters take great pride in their departments and traditions, but also in the areas they serve. This pride is often reflected in the uniforms they wear and the firefighting history their uniforms embody. Many symbols have become outwardly associated with firefighting such as the Maltese Cross, gold and silver uniform badges, and bugle collar insignias.

Uniform patches have also become a recognizable part of fire service tradition, culture, and lore. One fire department's website describes their patch by stating,

We take great pride in the design of our department patch... members wear this patch with honor... The center, or heart, of the patch is the traditional Maltese Cross. The Maltese Cross represents **charity, loyalty, gallantry, generosity** to friend and foe, **dexterity** of service, and **protection** of the weak. It is also carried to honor those who carried the insignia before us. (Kemah Fire Department, n.d.)

Uniform patches have become a form of personalization and identification across the fire service. Firefighters regularly wear patches with pride on baseball hats, tee shirts, and their uniform shirt-sleeves. Silk-screened patch replicas are also frequently seen on all types of fire fighter clothing. Sometimes patch designs are incorporated into thing like apparatus paint schemes (Figure 1) or fire engine hose bed covers (Figure 4).



Figure 1. Patch Themes FDNY Apparatus and Ladder Board Image (From Martinelli, n.d.; Worthpoint, n.d.)

Patches are often traded as firefighters visit their brethren around the world. Bulletin boards with large patch collections are a common sight within firehouses. Patches state, "I am a firefighter, and this is where I work."

Several different patch types are frequently seen within fire departments. One patch generally represents the entire department. For example, Figure 2 shows department patches for the Seattle Fire Department and the Fire Department of New York.



Figure 2. Department Patches: Seattle Fire Department Patch Image (Flickr, n.d.) and FDNY Patch Image (From New York City, n.d.)

Sometimes, individual fire stations develop distinctive patches to identify their houses or companies (Figure 3). Patches establish unique identities based upon significant station or company characteristics. Distinctive slogans are commonly incorporated into station patches. For example, patch designs may represent perceived company traits, such as aggressive firefighting, or the neighborhoods they serve like Midtown Manhattan. Patches may also represent some off-colored qualities intended to be humorous.



Figure 3. FDNY Patches (From New York City, n.d.)

Pop culture has also influenced some station logos and associated slogans. For example, Seattle Fire Department, Station 9 incorporated both the logo and name of a popular battery brand (Figure 4). While such logos help solidify the cultural perception that firefighters have of themselves, logos may also perpetuate the public's perception of the fire service by openly advertising common stereotype, like being "Ever Ready."

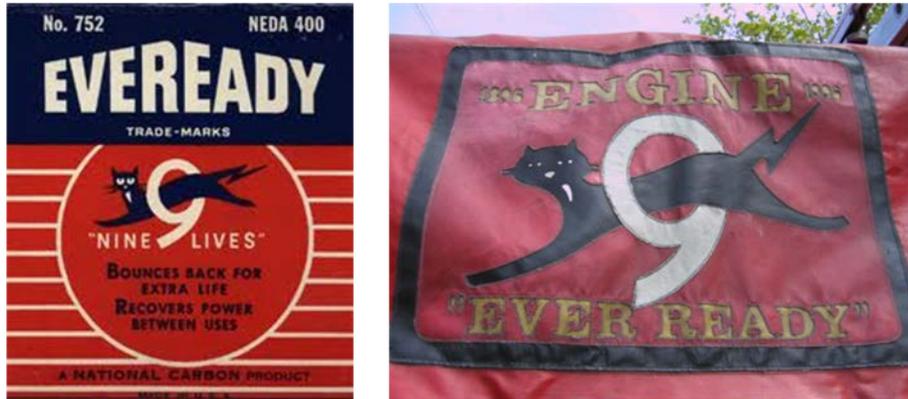


Figure 4. Ever Ready: Eveready Image (From Cox, 2010; Morris, n.d.)

After talking with firefighters, one reporter stated:

Firefighters see the patches as a way of channeling the spirit of those who have come through the house before them to those who will come after. They are a means of finding comedy in tragedy, strength when strength is feigned and a sense of personality where uniformity is expected. (Lee, 2007a)

Other explanations have also been offered by firefighters themselves to help explain the rationale behind fire department station patches, including:

- “We like to identify with the smaller group” (Lee, 2007a).
- “This gives us a little bit of individuality” (Lee, 2007a).
- “It’s a pride thing” (Lee, 2007a).

Fire department patches may be seen as a form of personal identity and self-expression within the larger social framework defined by SIT. Patches are personally distinctive; they are representations of self-ascribed personal attributes. While providing a level of self-categorization at the station or company level, patches do not conflict with

the governing expectations of the larger social order because they have become an integral part of that larger order. In short, fire department patches state, “I’m a firefighter, and this is where I work.”

#### **F. ESTABLISHING A “SAFETY CULTURE”**

The initial conceptualization of the term “safety culture” can be traced back to the Chernobyl nuclear power plant accident in 1986. According to Cox and Flin (1998), the International Atomic Energy Agency identified a “poor safety culture” as a contributing factor to the Chernobyl disaster. A literature review by Zhang, Wiegmann and von Thaden (2002) suggests there is considerable disagreement among researchers as to the definition of a safety culture. However, several commonalities were found to exist throughout various literary sources. The concept of a safety culture is “defined at group level or higher, which refers to the *shared values* of all the group or organization members;” it “emphasizes the contribution from everyone at every level of an organization;” it “has an impact on its members’ behavior at work;” it is “reflected in an organization’s willingness to develop and learn from errors, incidents, and accidents” and it is “relatively enduring, stable and resistant to change” (Zhang, Wiegmann, & von Thaden, 2002, pp. 1405–1406).

A vast amount of the firefighting literature also talks about establishing a “safety culture;” however, this element of firefighting culture is not well described. Topics discussed in relation to a “safety culture” are quite broad. Some common topics include: not wearing seat belts (Alder & Fratus, 2007; Crawford, 2007; Wilmoth, 2007), driving too fast/driver safety (Alder & Fratus, 2007; Peterson, Amandus, & Wassell, 2009), aggressive firefighting, or seeking risk (Crawford, 2007; Alder & Fratus, 2007), unnecessary training deaths (Morris, 2005), giving safety lip service (Houska, 2010), and “because that’s the way it’s always been done” (Gassway, 2005).

Even after conducting numerous searches on the subject, no specific definitions of a “safety culture” materialized within the firefighting literature. Alder & Fratus (2007) provided a good description of the problem this author encountered. They talked about a “culture of safety” by stating, “such a culture can seem a bit elusive... Like the wind, you

know it's there; you can see its impact, but you don't necessarily see 'it.'" This may contribute to the problem of adopting a true "safety culture" within the fire service. If we cannot see "it" or define "it," how can we incorporate "it" into our lives?

Common sense implies that the notion of a safety culture should be an extension of the concepts of culture as proposed by numerous social scientists. This perspective is taken within the disaster management literature. One author defines "safety culture" as: "those sets of norms, roles, beliefs, attitudes and social and technical practices within an organization which are concerned with minimizing the exposure of individuals to conditions considered to be dangerous" (Toft & Reynolds, 1997, p. 15).

Toft and Reynolds (1997) highlights the fact that culture is not a thing but, complex, ever changing components of the human condition. They suggest that it is more a phenomenon that develops within organizations over time (Toft & Reynolds, 1997). The downside to this reality is that organizational culture is very resistant to change. We see this idea reflected in the following quotes about fire service culture:

- Commenting on change, one fire chief was reported stating "If it ain't broke, don't fix it" (Tresemer, 2007).
- "Most firefighters accept the need for an emphasis on safety but tend to give it lip service while passively resisting substantive attempts at change" (Houska, 2010).
- "Reluctance to embrace a safety initiative is a combination of a "macho" culture with an emotional aversion to change" (Houska, 2010).

So, is a "safety culture" or, a resistance to a "safety culture," actually a characteristic or trait of firefighting culture? Or, is it merely a conglomeration of loosely discussed topics? I propose that there are two possible answers to these questions: 1) no culture exists and people want to establish a new culture founded on safety; or 2) a loosely defined culture exists that challenges or opposes traditional notions of safety. From a philosophical perspective, one could argue that the absence of culture is in fact a type of culture; however, I believe this proposition must be soundly rejected. As shown so far, the fire service is rich with cultural diversity and tradition. It is definitely more appropriate to say that the fire service is defined by tradition and culture than naught. The social sciences also suggest that culture is always present in one form or another. As

a veteran of the fire service, I believe that a safety culture does exist. Unfortunately, safety is often a diminutive consideration when examining the fire service's cultural hierarchy of needs. Consequently, this author believes that the second proposition more aptly defines the notion of a safety culture.

## **G. RISK TAKING BEHAVIORS**

“We continue to act in a highly predictable manner and are shocked at the consequences.”

—Holt, 2010

Risk is something that people encounter in their day-to-day lives. There is no escaping risk. People drive to work, climb ladders to hang Christmas lights, and yet think nothing of the potential risks involved. Firefighters take risks too; however, the risks they take are a little different from those of normal citizens. What the average citizen may consider extreme, firefighters accept without a second thought. In an attempt to monitor worker safety, organizations like the U.S. Fire Administration and the National Institute of Occupational Safety and Health compile annual statistics documenting the injuries and deaths associated with firefighting. Statistics are presented as a means of tracking and highlighting risks taken and hazard exposures. The tragic events of 9/11, unfortunately, graphically highlight the profession's unpredictability when facing unknown hazards.

For firefighters, the frequency of risk exposure and hazard familiarity impacts their perceptions of danger. When firefighters repeatedly participate in specific activities without incident, the perceived hazards and risks are frequently attenuated through desensitization. The perceived dangers of their work environment are minimized within the confines of a firefighter's cognitive framework. When major failures do not materialize, firefighters may see this as a vindication for current procedures or the accepted culture. Therefore, until an accident occurs, there are no reference points from which to make a comparison within an individual's or an organization's cognitive framework. Consequently, actions are sometimes taken without due consideration for potential negative outcomes.

The established cultural context of one's work environment influences how job dangers are perceived. Individuals are more inclined to taking risks when belonging to a group than when acting alone (Clark, 1971). When examining crisis prone organizations, Pauchant and Mitroff suggest, "Self-inflated individuals and cultures are particularly prone to flirting with danger" (Pauchant & Mitroff, 1992, p. 97). According to Baigent, "In order to be seen as a *'good firefighter'* a firefighter must 'prove' to their colleagues that they can *'get in'* at a fire" (2001, p. ii).

We must then acknowledge that a group's "shift toward risk is induced by a cultural value for risk" (Madaras & Bem, 1968, p. 350). Acknowledging this reality for firefighters, Bruegman (2002) stated, "It's really very hard to change because often the systems that exist perpetuate past behaviors." Where most systems may act to stabilize socially deviant behaviors, in the fire service, the system acts to stabilize risky, questionable behaviors.

The problems encountered when instituting change may reside within the cultural and cognitive frameworks established through tradition. Most people generally find comfort in rationalizing their decisions by accepting the validity of their predecessor's past actions. Past crises may have also served to increase a group's cohesiveness, thereby reinforcing their previous assumptions and rationalizations. When evaluating decision-making processes in companies, researchers found that "managers and professionals in crisis-prone organizations attempted to protect their own individual sense of identity and their perceived sense of the organization's identity" (Pauchant & Mitroff, 1992, p. 4). Accepting a deficiency in one's perceptions may mean admitting failure, poor judgment, or unprofessionalism. Nobody wants to admit his or her personal mortal vulnerabilities or the dysfunctions of their organization's culture.

Adaptation is a common human quality. As people learn about their environment, they often seek methods to simplify the decision-making processes required by their reality. This simplification process is frequently done through the use of heuristics (Gilovich, Griffin, & Kahneman, 2002). For fire departments, we might recognize the phrases "because that's the way it's always been done" (Gassway, 2005) and "That's the way it's always been" (Horvath, 2010) as cultural heuristics used to justify or rationalize

decisions. Unfortunately, complacent attitudes may form in a direct relation to how firefighters perceive risk. By using heuristics that minimize the significance of events and process, managers may significantly contribute to the casual attitudes that sustain outdated and unsafe traditions.

One researcher suggests that learning to manage risk is essential to adaptation (Slovic, 2000). If the future were known, there would be no risk. If the right choices were always made, injuries and deaths would likely be minimized along with the need to adapt. Unfortunately, “[p]eople’s choices may occasionally stem from affective judgments that preclude a thorough evaluation of the options” (Shafir, Simonson, & Tversky, 1993, p. 32). In firefighters, this author suggests that an individual’s affective filter may impede learning from past events due to the negative emotional responses caused by changing the cultural rules of one’s working environment.

#### **H. REACTIONARY LEADERSHIP**

Fire department leaders are often reactionary; they institute change process only after intense public scrutiny or after organizational tragedy strikes; they are concerned with consequence management rather than strategic planning. While department administrators should be proactive in their attempts to identify, control, and eliminate safety hazards and barriers to progress, reactionary leaders do not. They are always reacting to day-to-day problems and failures. Many reactionary leaders simply spend their time and energy leading their organizations based on past knowledge rather than looking towards the future. For example, one author comments upon reactionary management within the fire service by stating that safety gets:

Significant attention and participation only when a serious injury occurs that cannot be hidden. Then people scurry about looking for a quick-fix solution. This reactionary leadership and response on safety can be devastating to an organization, its employees, and the public it serves. (James, 2009, p. 41)

Another author discusses reactionary leadership following a line-of-duty death. She suggests that a death:

Might force reconsideration of standard fireground practice. But suddenly changing the way things are done at fire, without further analysis or just time to let people heal, can lead to more problems than it solves. Especially in the aftermath of loss or trauma, people want stability and will be more resistant to even necessary change. (Willing, 2002)

The approach many leaders take might best be surmised by the adage “Ignorance is bliss.” This complacent attitude is altered only when a new crisis is encountered. This reactionary management style is frequently repeated within fire service literature:

- “Most organizational mission and safety standards are generated in reaction to an event—after the fact and in the form of directives, policies and guidelines.” (McDonald, 2003)
- “Our industry breeds reactionaries” (Brame, 1999)
- “We seem to have an almost automatic task-level response that causes us to do the same or wrong thing harder.” (Alder & Fratus, 2007)

Fire department social systems establish a context specific framework from which decisions are made and actions are taken. Potential hazards are evaluated within a cognitive framework that moderates firefighters’ perceptions of danger. If no dysfunctional failures are acknowledged within the established system, then the system will remain intact with all its associated deficiencies. The following quote seems to support this assertion: “Unfortunately, we never seem to address the fundamental structural changes necessary to effectively deal with the real issues at hand” (Markley, 2008).

A casual observer might ask—”Why aren’t changes being made?” After interviewing many leaders of crisis-prone organizations, Pauchant and Mitroff provide several possible lines of reasoning to explain why people resist change:

1. “The central most fundamental motivation for humans in Western societies is to preserve at all cost their sense of personal feelings, their inner view of themselves and of the world, their self-concept.” (Pauchant & Mitroff, 1992, p. 53)
2. “They attempted to protect their image of their organization, and of themselves, with rationalizations” (Pauchant & Mitroff, 1992, p. 60).
3. “Managers and employees alike are very skilled at developing rationalizations that will validate their day-to-day actions” (Pauchant & Mitroff, 1992, p. 83).

These positions seem logical. When someone acknowledges deficiencies or failure, they must do so to themselves and to others. In essence, they must renounce fundamental assumptions and beliefs that they once held as true. Following Pauchant and Mitroff's lines of reasoning, we see many similar rationalization strategies within the fire service.

- “because that’s the way it’s always been done” (Gassway, 2005)
- Commenting on change, one fire chief was reported stating “If it ain’t broke, don’t fix it” (Tresemer, 2007)
- “I’ve heard many seemingly unexplainable things justified rationalized? As, “Well, that’s the culture of the firehouse” (Look, n.d.)
- “Firefighters tend to resist anything that forces them out of their comfort zone” (Ferguson, 2006)

Many outside observers never consider the psychological relationship between members of the firefighting profession and their acceptance of job related dangers. Occupational hazards and duty related disabilities end the careers of 650 firefighters annually (Hildebrand, 1984). Additionally, 100 or so firefighters also fall victim to line of duty deaths annually (Moore-Merrel et al., 2006). The hazards and risks firefighters take are not random. They usually occur within known contexts that are familiar to both firefighters and their supervisors. Moore-Merrel et al. (2006) point out that nearly one-half of all line-of-duty deaths are directly controllable by either individual firefighters or chief officers.

Leaders often evaluate events for their learning potential and as a means to solve newly recognized deficiencies. After action reports and incident summaries may describe actions that either prevented or contributed to firefighter injuries. Individual or informal group assessments are also made in an attempt to construct and/or assign meaning to an event (Green, Wilson, & Lindy, 1985). Mitroff et al. state, “[a] common and persistent tendency in human affairs is the search for simple solutions to complex problems” (Mitroff, Pauchant, Finney, & Pearson, 1989, p. 269). So, while someone may seek to understand—‘why did this happen to me?’, leaders must recognize that transitory

incidents are a symptom, and not the root cause, of deeper organizational failures. Simply put, traumatic event appraisals may be moderated by past events, experiences, and the social environment surrounding the incident.

## **I. GENERATIONAL DIFFERENCES**

“There are generational differences between veterans and rookies that cause tension, regardless of race or gender.”

—Richardson, 2006, p. 5

The fire service is in a constant state of flux as older firefighters retire and younger individuals are recruited and trained to take their place. The differing generational attitudes and expectations embodied within new recruits challenges existing department standards and social norms. It might be said that today’s younger firefighters simply exhibit different value systems and views of the world; their perspectives are much different from those of their predecessors.

McCarl’s (1985) examination of the District of Columbia Fire Department (DCFD) noted generational difference among firefighters. He assigned firefighters to different categorizations based upon race<sup>2</sup> and age. Outside of race, firefighters were generally categorized as young or old. McCarl noted that older, more experienced, firefighters tended to support organizational rules and traditions. Younger firefighters tend to be “more outspoken and independent and less awed by authority” (McCarl, 1985, pp. 105–106). Younger individuals seek to understand why they must perform certain duties and accomplish certain goals. McCarl also noted that capitalizing upon these differences might prove useful when attempting to develop strategies to institute cultural changes.

From an insider’s perspective, this author believes there is a significant variance in organizational personnel originating from generational differences. Many fire departments have seasoned veterans with 30 to 40 years of experience. They may also

---

<sup>2</sup> Race significantly contributes to the conception of culture. However, due to the complexity of the topic, I will only acknowledge race as a complicated cultural variable. I will not discuss race any further within the confines of this thesis.

have new recruits that still are teenagers. Anecdotally, I have observed significant generational skill set gaps. For example, older Baby Boomers, post-WWII baby boom (1946–1964), are organizational doers. They are readily familiar with a wide array of tools and heavy equipment. They are skilled at using, cleaning, and even repairing things like chain saws. They have a strong foundation in building construction because they were builders, plumbers, and electricians in their outside lives. The Generation X'ers, roughly anyone born between 1965 and 1980, are slightly less skilled. They might have pounded a few nails or used a chainsaw in the past. They might not understand how to fix a broken chainsaw but they will report empty fuel tanks during equipment checks. The Generation Y crowd has a completely different manipulative skill set and knowledge base. Before becoming a firefighter, a chainsaw was something they last saw in a horror movie. These individuals are better suited to replace computer motherboards that spark plugs.

Organizational leaders must recognize that the fire service is not a demographically homogenous group. Generational difference impact many different areas important to organizational culture and department management including: the way individuals learn and integrate knowledge into their memories; respect for organizational leaders, both formal and informal; and diversity of general knowledge and pre-existing manipulative skill sets. For example, some individuals may learn best through self-study and personal reading; others may require personalized study programs with extra hands-on time, while others may learn best through multimedia presentations.

Understanding the broader cultural differences individuals bring into the fire service is one key to leadership success. One author speaks to this topic by stating, “[t]he social norm is to deal with people as you yourself have been dealt with” (Waite, 2008, p. 12).

Simply put, the fire service cannot meet the demands of contemporary society by living this statement. One hundred years of tradition and antiquated management practices will not disappear overnight. So, today's fire service leaders must effectively

communicate with tomorrow's leaders if they hope to move past many of the fire service's engrained traditions; they must not "deal with people as you yourself have been dealt with."

## J. BRAVERY & HEROISM

Society...is a vehicle for earthly heroism...Man transcends death by finding meaning for his life....It is the burning desire for the creature to count....What man really fears is not so much extinction, but extinction with *insignificance*....

—Peters & Waterman, 1982, pp. xxii–xxiii<sup>3</sup>

Heroic myths have been passed down across societies and cultures from one generation to the next for centuries. History shows us that as decades pass by new heroes step forward to take the place of those long dead. Whether factual or fictional, heroes still maintain a mythical place within society. The writings of historical psychoanalysts such as Freud and Jung illustrate that "the logic, the heroes, and the deeds of myth survive into modern times" (Campbell, 2008, p. 2). The legendary actions of Achilles, Robin Hood, and Abraham Lincoln are offered up as noble behaviors to schoolchildren across our country. These heroes faced unimaginable odds, yet they were willing to commit to difficult paths filled with trials and tribulations that had the potential of ultimate defeat.

Stories are commonly told to illustrate the heroic journey individuals take in defense of their cultural values and expectations. While heroic actions might be difficult to explain and comprehend, they are of great importance when examining heroes' motivations (Campbell, 2008). Achilles held true to revered military traditions, but sought fame, glory, and immortality in tales yet to be told. Abraham Lincoln accomplished masterful feats of diplomacy and military prowess during the American

---

<sup>3</sup> Peters and Waterman are quoting cultural anthropologist Ernest Becker's book *Denial of Death*. (1973).

Civil War; he made unpopular decisions during difficult times that have withstood the scrutiny of history's most ardent critics, and he did so in the honorable service to his country.

The innate nature of firefighting places individuals in circumstances of peril and uncertainty. When 343 firefighters died following the tragic terrorist attacks of 9/11, the public became acutely aware of firefighters' heroism, dedication, and selflessness. The selfless sacrifices made on that early September morning brought all firefighters to the forefront of society; they became a symbol for virtues of years long past and heroes long forgotten. Society recognized and saluted the distinguishing characteristics of honor, bravery, valor, and courage embodied in FDNY's members. Firefighters were cast as heroes around the world (Faludi, 2008; My Hero, n.d.).

When facing imminent death, the propensity to link bravery, courage, and valor with heroism is a common feature of the human condition. Whether in ancient societies or in contemporary civilizations, feats of heroism have been universally regarded as praiseworthy and deserving both reward and special recognition. We might easily recognize heroic qualities in photos, media reports, or movies whether extolling the virtues of firefighters in life and death or triumphant soldiers returning home from war.

Whether by noble deed or happenstance, heroes are brought to the forefront of society because of some memorable action. According to Becker & Eagly (2004), a common defining theme among heroic acts is the combination of risk taking behaviors in the service of another's welfare or some other socially valued goal. Often, individual motivations are also critically examined. For example, heroic actions are generally recognized by altruistic actions rather than self-serving egotistic motives.

Throughout fire service history, firefighters have felt compelled to defend the traditional role expectations and reputations associated with the profession. Independent investigators have repeatedly commented on the fire service's hero culture (McCarl, 1985; Fire 20/20, 2007). Literary examples documenting their self-imposed role

expectations date to the first part of the twentieth century. Speaking at the funeral of a chief officer and four firefighters in 1908, Chief Edward F. Croker of the FDNY said the following:

Firemen are going to get killed. When they join the department they face that fact. When a man becomes a fireman his greatest act of bravery has been accomplished. What he does after that is all in the line of work. They were not thinking of getting killed when they went where death lurked. They went there to put the fire out, and got killed. Firefighters do not regard themselves as heroes because they do what the business requires. (Croker, 1908)

More recent sources provide a similar role representation:

- Speaking about age-old firehouse culture, Kennedy (1996) states, “bravery is sometimes equated with taking unnecessary risks.”
- “It’s our duty to expose ourselves to the same risks we ask our guys to take. It’s part of the sacred trust that exists between officers and firefighters” (Salka, 2005, p. 4).

Acknowledging weakness or fear would only serve to tarnish hard fought reputations. Psychologist Philip Zimbardo states, “[h]eroism and heroic status are always social attributions. Someone other than the actor confers that honor on the person and the deed” (2008, p. 460).

Firefighters seeking to maintain their heroic images are driven by both internal and external psychological pressures. Externally, fire fighters’ prestige is not constituted by any single action or event, but by a series of longitudinal actions that garnered public praises based upon shifting societal expectations and values. Brown (1986) presents a theory outlining the cultural value of risk assumption. This theory implies that society values risk taking and rewards those individuals that partake in such behaviors. Internally, how difficult would it be for a firefighter to face his brethren following an incident where one’s actions did not coincide with one’s expected actions? Individual motivations may vary from narcissism to altruistic self-sacrifice but, in the end, people risk their lives in the process of defending time tested principles because a failure to do otherwise might be seen as breaking a solemn trust bestowed upon them by society and

their brethren. Losing the trust explicitly granted individuals by the membership is tantamount to treason and, consequently, cultural suicide.

## **K. FIREFIGHTER FUNERALS**

Firefighter funerals are eye-catching spectacles of pomp and circumstance. Firefighters march down city streets in their dress uniforms carrying flags. White gloved honor guard members carry flag draped caskets to waiting fire engines. In addition, bagpipers march in step as they lead a funeral cortege. Local residents show their respect, line the procession route and listen to the wail of an Irish dirge. According to Rhodes, “Today, the practice is universal...The pipes have come to be a distinguishing feature of a fallen firefighter’s funeral” (2006, p. 106).

Even politicians recognize the significance of such events. For example, in his book *Leadership*, Mayor Rudy Giuliani titles one of his chapters “Weddings Discretionary, Funerals Mandatory” (Giuliani, 2002). Communities unite during firefighter funerals and bestow upon the fallen individual(s) honor and glory as they are mourned in accordance with long standing fire service traditions.



Figure 5. Funeral Parade: The Boston Gaelic Fire Brigade played a dirge (From Ryan, 2007)

The images presented here illustrate the tremendous public support for Boston firefighter Paul J. Cahill (Figure 5) as he was transported to his final resting spot in a flag-shrouded casket. The overwhelming support shown for Cahill was not unique. Figure 6 shows but a fraction of the support for Brooklyn firefighter Daniel F. Pujdak as he was carried away from St. Cecil's Catholic Church in Brooklyn. Media reports stated, "Thousands of firefighter saluted Mr. Pujdak's coffin, which was covered with an F.D.N.Y. flag" (Lee, 2007b). Together, these images illustrate the tremendous support and respect fallen brothers and sisters are shown by the fire service.



Figure 6. Leaving the Church: Thousand Gather in Brooklyn for Firefighter's Funeral (From Estrin, 2007)

An estimated that 10,000 firefighters came to West Roxbury offering their respects and white-gloved salutes (Haggerty and Ryan, 2007). Figure 7 shows an impromptu public memorial established to remember Cahill. "Mourners left flowers in bunches. Candles burned. Teddy bears piled up. One mourner left a toy fire truck. Another scrawled on a baseball, 'Thank you.' And still others just stood and wept" (Globe, 2007).



Figure 7. Flower Memorial: West Roxbury Fire Memorial (From Globe, 2007).

The state's governor and a U.S. senator attended the funeral service. Media accounts, family members, and friends "described Cahill not only as a hero, but as an accomplished cook, a doting father, a loving husband—a man, his firehouse captain said, 'impossible not to like'" (Cramer, 2007).

When questioned about Cahill's funeral, one firefighter stated, "This is what we do... This is just how we stick together" (Cramer, 2007). At Mr. Pujdak's funeral, one city commissioner told Pujdak's family to "Find solace in the fact that though a brother and son has been lost, you have gained 11,500 sons and brother" (Lee, 2007b). Writing about the funeral of two FDNY firefighters, Halberstam (2002) stated, "It seemed as if the entire world of New York City firefighters had come together as one immense family" (Halberstam, 2002, p. 164).

Images and media accounts like those above must have significant impacts of the psyche of all firefighters. But, were the media's accounts of Cahill's death accurate in describing him as a hero? Did they serve some other purpose like gratifying some illicit human need? Or, did they simply help firefighters solidify their social identity by publically venerating a fallen brother?

Individuals may evaluate the meaning of a significant event in terms of its personal impact. Following a fatality fire, firefighters may question what, if anything could have been done to prevent the accident. They may seek to attribute the cause of the event to someone or something. Was the outcome controllable or uncontrollable? Was the accident an act of God or an act of man? By organizing elaborate funeral processions, individuals are provided an outlet that suggests the loss of life was not for naught. The meaning an event assumes may also serve to facilitate or constrain specific behaviors. For example, by justifying and honoring the loss of life, firefighters are empowered to return to work; their self-actualization process is not interrupted.

During times of tragedy and sorrow we often seek prominent social symbols to give us meaning and comfort. According to Rhodes:

The tradition of bagpipes being played at fire department funerals in the United States goes back over one hundred and fifty years... It was somehow okay for a hardened firefighter to cry at the sound of pipes when his dignity would not let him weep for a fallen friend. (2006, p. 105)

Firefighter funerals are a reflection of our dedication and devotion to our brethren for the sacrifices they made when duty called; they are a way we memorialize lost lives. Funeral may also serve as a mechanism by which individuals construct meaning. Dollinger (1986) suggests that individuals and groups actively seek to construct meaning from tragic events. Ursano, Fullerton, & McCaughey (1994) state, “[m]eaning is a rich and varied concept which is not static but results from the interaction of past history, present context and physiological state. Thus, the meaning of a traumatic event changes over time with the individuals’ ever changing psychosocial context” (Ursano, Fullerton, & McCaughey, 1994, p. 20).

Firefighter funerals are a public affirmation of a socially constructed role typification. The overwhelming support firefighters experience following a line of duty death (LODD) acts to reinforce the role behaviors embodied in American firefighting lore. Institutionalized expectations of bravery and self-sacrifice are cognitively validated, thereby, allowing individuals to rationalize future repetitions of the same behavior. During this validation process, both dead firefighters and their coworkers are perceived

not as unique individuals, but as living embodiments of a socially constructed stereotype. The individual is no longer seen as a typical person; they are now recognized as a hero firefighter. Consequently, the nonjudgmental support shown during firefighter funerals becomes a symbolic objectification that reinforces potentially pernicious behaviors.

## **L. AGGRESSION**

Fire ground aggression is common amongst firefighters. It might even be said that it is in their nature. Firefighters have been running into burning building for hundreds of years. Firefighters often act before thinking. The repetition of these actions has instilled such behaviors into the culture of the fire service. This reckless behavior is “often fueled by peer pressure” (Kennedy, 1996). According to McCarl, “[T]he more aggressive and competent a fire fighter becomes, the more he is shown respect and affection” (1985, p. 97). Consequently, the heroic actions displayed by firefighters may be interpreted as a means by which they construct a positive social identity for themselves.

The lack of due regard for personal safety is recognized across society. The following quotes may help to elucidate the aggressive nature exhibited by many firefighters:

- “It was a matter of great pride for someone like Ray to be joining a department in which the traditions of the old “smoke-eaters” were still alive: here there would be a respect for aggressiveness, an unbridled passion for the work of firefighting, and a certain disdain for those safety precautions that might interfere with the task at hand” (Chetkovich, 1997, p. 17).
- “On a box alarm response there is competition between... companies... to reach the fire” (McCarl, 1985, p. 70).
- “You have to be aggressive in this job” (McCarl, 1985, p. 126).
- “Ours is an aggressive interior firefighting fire department” (Alder & Fratus, 2007).

The aggressive behaviors exemplified within these quotes may reflect a sense of obligation or duty to one’s brethren. Any failure to meet the expectations of one’s brethren might have negative self-presentational implications. Unfortunately, threats of social alienation may result in firefighters putting themselves into dangerous, sometimes

fatal, situations. Along this thought process, one firefighter stated, “We take too many chances and we put our people in dangerous positions... Still, that’s the nature of the beast in the fire service” (Lasky, 2006, pp. 9–10).

The nonchalant attitude may carry over into other areas of the job. Do firefighters take risks just for risks sake? Do fire fighters drive fast for thrills or because the job’s social mandates require such actions. Symbolic acts of bravery may be one method by which individuals conform to expected cultural norms. “[T]o be considered successful, you have to push that envelope” (Kennedy, 1996).

The same factors protecting an individual’s self-esteem and his desire to seem successful might also contribute to reckless actions such as not using proper personal protective equipment or driving without seat belts. Leary, Tchividjian, and Kraxberger (1994) suggest that these deleterious actions might result because individuals fear being perceived as being too careful. The literature does lend some support to this belief.

- “Risk is expected and acceptable, even to the point of death... depending on the level of the institutionalization of risky behavior by the culture of the department, groups or organizations of which the firefighter is a member” (Crawford, 2007)
- “It’s not supposed to be a safe job” (Chetkovich, 1997, p. 21)

Crawford (2007) talks about a theory called ‘firefighter duty-to-die syndrome’ where firefighters believe that dying in the line-of-duty is a noble and rewarding part of the job. In an editorial follow-up article, Wilmoth (2007) blatantly supports Crawford’s claim by stating “Crawford is correct” and asks, “is it only a brotherhood when someone get hurt or dies?” The symbolic displays of aggression may be one method by which individuals mediate the influence of cultural norms and their need to belong. Consequently, aggressive behaviors may be seen as outward displays of symbolic bravery, expression of conformity, and a cognitive acceptance of group standards in an effort to meet cultural expectations.

## **M. THE FIREFIGHTING ETHOS**

Because our mission is saving lives, we can legitimately lay claim to some pretty lofty values—things like love, bravery, and heroism.

—Salka, 2005, p. 49

The American firefighter's ethos contains a broad spectrum of guiding beliefs and behaviors. The distinguishing nature and guiding beliefs of firefighters have varied descriptions including: a "can do attitude" (Fire 20/20, 2007; Lagnado, 2002; Brame, 1999); teamwork (Coleman, 1999); courage, toughness, and aggressiveness (Chetkovich, 1997); loyalty (Wilmoth, 2005b); and brotherhood (Salka, 2005). The 2007 Firefighter Life Safety Summit report stated, "[a] proud tradition of bravery and raw courage is one of the fundamental components of the established American fire service culture. Firefighters are prepared to risk and, if necessary, lose their own lives to accomplish their mission" (Routley & Manning, 2007, p. 6).

These qualities help define a organizational culture to which members subscribe. If we accept that a group's identity is a determinant of their perspective on life, then the emotions associated with belonging to the group might influence the individual's normative social behavior. Things like peer pressure, a sense of belonging, and construction of one's personal identity will subsequently reflect back upon and strengthen an organization's dominant cultural framework.

Markus & Kitayama (1991) suggest that beliefs about "the self" are key elements when defining an organization's cultural framework. Elements like attitudes, motives, values, and emotions all contribute to an individual's behavioral characteristics. In other words, someone's value system directly impacts his or her decision-making processes and behaviors. In a similar manner, a group's ethos may act as an invisible cognitive force guiding individual members as they navigate life's daily challenges (Schwartz, 1999). From this perspective, we might begin to understand how the firefighting culture justifies statements like "Give us any challenge; we'll face it and overcome it" (Lasky, 2006, p. 9).

With such an overtly confident perspective we may begin to understand how firefighters may get themselves into trouble on the fire ground. Firefighters frequently face many significant work place hazards and health risks. They flirt with danger on a daily basis. For example, they work above fires, on steep roofs; they enter structurally questionable buildings; and they are routinely exposed to toxic fire gases and smoke. The diversity of firefighting work illustrates the multiple risk components attributed to an individual's actions in their search for social acceptance. And, as quoted earlier by one disaster researcher, "[s]elf-inflated individuals and cultures are particularly prone to flirting with danger" (Pauchant & Mitroff, 1992, p. 97).

Firefighters also face very prominent intra-organizational social risks. What will their fellow fire fighter think about hesitation or inaction during emergencies? The following statements are used to illustrate how embedded cultural frameworks influence firefighter behaviors and attitude:

- "Sept. 11 clearly demonstrated the commitment that firefighters have to put service over self" (Bruegman, 2002).
- "Most fire fighters are too proud to ask for help in any situation or to readily admit fear" (McCarl, 1985, p. 15).

The concept of social embeddedness is used by social scientists to help explain individual behaviors within an organization. It was articulated that the relationship between behaviors of individuals and organizational actions "are so constrained by ongoing social relationships that to construe them as independent is a grievous misunderstanding" (Granovetter, 1985, p. 482). Therefore, an individual's social identity is linked to the functional relationship mutually established between the person, their environment, and their ethos.

## **N. CULTURAL SUMMARY**

Firehouse stories, rites, and rituals serve the symbolic purpose of legitimating behaviors rather than constraining pernicious activities. Research has shown that individuals who assume a group's moniker are more likely to participate in that group's activities, culture and resulting behaviors (Ethier & Deaux, 1994). Social identity theory similarly asserts that someone's social identity is their realization that they belong to a

social group (Hogg & Abrams, 1998). Through such realization processes, individuals within the fire service may begin to acquire self-meaning, they may begin to see themselves as firefighters. Stets and Burke suggests that the consequences of such self-categorization processes “is an accentuation of the perceived similarities between the self and other in-group members” (2000, p. 225). In other words, role perceptions become a standard that guide behavior as individuals begin to incorporate all the social and societal expectations associated with that role (Burke, 1991). With this in mind, we shall now explore how society and the media have inadvertently helped to maintain firefighting culture.

THIS PAGE INTENTIONALLY LEFT BLANK

## V. CULTURAL PERPETUATION

### A. THE MEDIA AND IMAGES OF SOCIETY

We live in a time that has become known as the Information Age. It is defined by 24-hour news cycles and YouTube videos. As students of modern humanity, one of our challenges is to identify and interpret symbols of contemporary American society and their relationship to culture and social interactions. We must realize that symbols take diverse forms and impact society in many different ways. Images and symbols are open to varied cognitive interpretations because our cognitive analytical processes are influenced by our diverse backgrounds, education, and culture (Bonnici & Proud, 1998).

We must recognize that our society is an image driven society; it is influenced by television, newspapers, magazines, and billboard advertisements that continually bombard our visual senses. For example, following the first Gulf War, we saw an increase in commercial advertising that played upon our national sentiments and our “culturally based value structures” by using emotional nationalistic and patriot imagery (Lull, 2000, p. 19). Following 9/11, we saw ground zero photographs as visual allegorical expressions of our society in crisis. Over time, their repetition helped us comprehend the tragic realities of loss and change. In either case, we must recognize media images as snapshots of society that define our reality and the human condition.

Popular media images and symbols run the gamut from the informative to the provocative. Current events garner media attention only as long as they continue to stimulate the public’s interest. Media outlets look for images that capture unique qualities of humanity; they seek images that serve specific purposes. Editors understand that photographs help define life’s newsworthy events. One author suggests, “[e]vents don’t just get into the news simply by happening” (Hartley, 1982, p. 75). In his examination of the news media, Hartley (1982) describes several characteristics that elevate an event’s newsworthiness including: size, meaningfulness, and reference to elite nations, groups, or personalities. Hartley suggests that events, which incorporate such characteristics, will likely summon more media coverage. For example, significant

events like bombings or disasters in powerful countries will receive increased media attention, whereas, similar events in lesser countries might be ignored. In essence, images exhibiting newsworthiness characteristics have the potential to become lasting societal images.

Images elicit rapid emotional responses unmatched by text. Photographs are not inherently good or bad; they are remarkably powerful; they are designed to communicate with people, to evoke feelings, or spur actions. An old media colloquialism states, “if it bleeds, it leads.” The essence of this media truism is to capture the audience’s attention immediately. For example, local news channels regularly grab our attention and entice us with sensational trailers. While the trailers stimulate our interest in the upcoming broadcast, they do so before any substantive content is presented.

Where written text takes time to process and extract meaning, graphic images immediately and forcefully communicate with the observer. Unlike written language, graphic or symbolic images do not require literacy to comprehend. When comparing visual imagery to written text, Ann Barry writes, “What visual images express can only be approximated by words, but never fully captured by them...images plunge us into the depth of the experience itself” (1997, p. 75).

The mass media provides society with a censored version of reality. They do so through selective editing. Where movie producers might use dramatic music to create a connotative feeling of impending doom, the media uses perspective, distance, or angle to lend connotative meaning and emotion to imagery. Seeking a desired effect, a discerning editor might present images based upon their connotative meaning rather than their explicit meaning. Potentially relevant visual information is effectively ignored or selectively modified. Media researchers also support this position. One author suggests the media has “inbuilt tendencies to present a limited and recurring range of images and ideas which form a rather special version of reality;” they are also prone to patterning and stereotyping of their content (McQuail, 1977, p. 81). Bonnici and Proud (1998) suggests that newspapers typically look for pictures that primarily give viewers emotionally relevant information without context. The net effect is that popular media imagery,

whether front-page newspaper images or magazine covers, is designed to capture the casual observer's attention; they are not necessarily designed to say anything about the underlying story or reality.

An individual's knowledge base and resulting perceptions are driven more by media influences than by personal contact or experience (McQuail, 1977). Within society, there are socially defined stereotypical roles for both first responders and disaster victims alike. The former may be seen as strong and powerful, whereas, the latter may be seen as weak, destitute or helpless. But, why does society have such preconceived notions about heroes and victims? Why do people make such assumptions? Lerner (1980) suggests that the characteristics ascribed to different aspects of our society help people make sense of their surroundings; people want a predictable, controllable world. Another author suggests, "[t]his illusion... enables people to achieve their goals and avoid becoming overwhelmed" (Holloway & Fullerton, 1994, p. 39). In other words, people utilize assumptions to make their world more manageable and predictable.

In summary, media imagery may exert undue influences upon society since images are expressly selected to garner the public's interest. By selecting specific images for distribution, the media legitimizes society's perceptions, assumptions, and stereotypes. The sheer number of media outlets around the world also exponentially increases the impact images have today. As these outlets visually bombard us, images are elevated and glamorized by members of society. Consequently, popular images may garner more social capital and significantly influence both society and culture.

## **B. IMAGES AND CULTURE**

Images selected by media outlets indirectly frame the cultural, social, and political events deemed newsworthy by society. Hartley writes, "the news contributes to the 'climate of opinion', to the horizons of possibility...In other words, it functions to produce social knowledge and cultural values" (Hartley, 1982, p. 56). While nobody can predict what social knowledge or cultural values the media might influence tomorrow, it

is safe to say that they will influence society and they will do so in a substantial and complex manner. Hartley supports his position by quoting cultural theorist and sociologist Stuart Hall. Hall states:

The mass media are more and more responsible (a) for providing the basis on which groups and classes construct an 'image' of the lives, meanings, practices and values of *other* groups and classes; (b) for providing the images, representations and ideas around which the social totality, composed of all these separate and fragmented pieces, can be coherently grasped as a 'whole'. This is the first of the great cultural functions of the modern media: the provision and the selective construction of social knowledge. (Hartley, 1982, p. 79)

By selecting, censoring, and presenting events deemed newsworthy, media outlets shape the face of society. They frame our reality and understanding of many events, people, or cultures because we lack the firsthand experience necessary to form an educated opinion about reality. They inadvertently define the personal and social identities of individuals and society. In other words, the images seen by society help determine who and what we are; they define the struggle to understand the human condition by comparing it against the historical challenges each generation faces. Extending this concept to the fire service, we might say that the cultural, individual, and group behaviors exhibited by firefighters are more aptly a reflection of societal expectations because the symbolic status assigned to firefighter is repeatedly reinforced through media imagery.

Society is replete with images that serve to reinforce society's mythical assumptions. In popular mass media sources, from television to comic strips, individuals are frequently captured exhibiting noble and courageous actions. For example, few photographic images, like Charles Porter's Pulitzer Prize-winning photograph documenting the aftermath of the Oklahoma City Bombing (Figure 8), have so poignantly captured the hearts and minds of a country. On April 19, 1995, a powerful explosion ripped through the Alfred P. Murrah Federal Building; the explosion originated in an explosive-filled truck. It claimed the lives of 168 people and injured more than 600 others (Shariat, Mallonee, & Stephens-Stidham, 1998). This photo is moving because it typifies a symbolic generalization about the human existence; in that, a heroic firefighter

saves the life of an unsuspecting child caught in a dreadful act of terrorism. However, while the visual imagery immediately tells your one reality, your mind may slowly become aware of a vastly different reality—the child is dead!



Figure 8. Hero Firefighter “Hero Firefighter Chris Fields Carries Baylee Almon”  
(From Caruso, n.d.).

Is the story associated with this photograph one of death or one of heroism? A parent may make a personal connection with the lifeless child. A firefighter may see the selfless disregard for life as a fellow brother went into a collapsing building to rescue the child, not knowing whether the child was dead or alive. In either case, such imagery will forever shape society. Will a mother have reservations about dropping her child off at day care? Will a firefighter remember the national acclaim bestowed upon one individual during an incident of national significance?

Symbolism is an extremely powerful form of nonverbal communication. People regularly engage in and express ideas and feeling through symbolic forms of communication. Someone walking down the street may give you a wave or give you the finger. In either case, the symbolic message is readily apparent. Symbolic images may

also elicit varied emotional responses. For example, what do you think about when you see an image of Jesus Christ nailed to a cross or a bold Swastika emblazoned on a waving flag?

Everyday symbols have the power to cause people to act in a certain manner or pursue a particular course of action. One author defines “symbolic power” as the “capacity to intervene in the course of events, to influence the actions of others and indeed to create events, by means of the production and transmission of symbolic forms” (Thompson, 1995, p. 17). Society is replete with examples of “symbolic power.” Psychologist Phil Zimbardo dramatically illustrated the effects of symbolic power when he conducted the Stanford Prison Experiment (2008). Allen Funt similarly influenced behaviors in a humorous manner during his syndicated TV show *Candid Camera* (Zimbardo, 2008). Some benefits associated with symbolic power include: the accumulation of respect, recognition, and prestige (Thompson, 1995). Thompson terms the social benefits of symbolism as “symbolic capital.”

Symbolic interpretations are both subjective and personal. This reality might best be illustrated by looking at the American flag. For most Americans, the flag’s red, white and blue imagery most likely connotes feelings of pride and patriotism. However, for individuals within Muslim or communist countries, the American flag may elicit negative emotional feelings or expectations that are inconsistent with our American reality. Hartley (1982) coined these inconsistencies as myths. He recognized the complexity associated with visual imagery and suggested that their ambiguity often leads to myths (Hartley, 1982). Myths are neither discrete nor unorganized because one of their prime purposes is to provide structured meaning. Fiske supports this position and states that myths “are themselves organized into a coherence that we might call *mythology* or an ideology” (Fiske & Hartley, 2003, p. 30).

The mythical values attributed to imagery are conceptual in nature. Images, therefore, must be recognized as subjective elements open for interpretation among different members of a group. A group’s shared interpretation may assume cultural significance only through agreement by its members. Cultural connotations derived from images and symbols involve a human element—the observer’s perspective. Only through

human intervention and interpretation will an object's meaning take form. Once accepted, the culturally determined subjective interpretation may actively feedback upon and influence group members. In essence, for individuals, accepting the group's interpretation is one manner by which group membership is expressed and solidified (Fiske & Hartley, 2003).

### **C. FIREFIGHTERS AS SYMBOLS OF AMERICAN RESILIENCE**

Fire service leaders must recognize media influences as drivers of social and cultural expectations. We learn and gain knowledge through observation. Our actions are a response to the knowledge we acquire through our senses: we do not touch hot things because they burn us; we feel pride when someone tells us we did a good job; we do not recklessly walk across busy streets because we can see the inherent danger of fast moving cars. In the same sense, our interactions with the media have helped defined our roles within society. DeFleur (1964) suggests our understanding of occupational roles “takes place largely through accidental or haphazard exposure to a variety of learning sources. Among these, the mass media appear to play a major role” (p. 57).

As sentient bystanders, we have front row seats to an edited version of reality distributed by the media. The media selectively defines normative values, social roles, behaviors and myths by presenting events as factual and behaviors as non-negotiable expectations. In other words, we are inconspicuously influence by the way certain social rolls are framed. Lull (2000) suggests this largely occurs because of “the way mass media's symbolic content frames ‘reality’” (Lull, 2000, p. 50).

It is relatively easy to find situations where certain cultural perceptions have been selectively framed by the media. For example, media outlets documenting the aftermath and carnage of 9/11 frequently integrated firefighters with red, white and blue imagery. Firefighters were portrayed as the defenders of freedom and the victims of tyranny. Consequently, the media may help shape firefighter behaviors by influencing their self-concepts and social realities.

When discussing the role of myths within the popular media, Hartley highlights society's tendency to elevate people, groups or events to an elite status that society deems

important (1982). For example, the media has mythologized FDNY firefighters following 9/11. During newsworthy events, the likelihood of achieving an elite status increases. The photograph by Thomas Franklin<sup>4</sup>, “Raising the Flag at Ground Zero” (Figure 9), graphically depicts many significant elements. It captures both elite personalities (firefighters) and a significant event (9/11). Also, within this image is a very important symbol, the American flag, which connotes feelings of patriotism within most Americans. Similarly, one media outlet stated that it portrayed firefighters “Standing defiantly against the gray and white landscape of devastation, these dust covered men and the vivid red, white and blue of Old Glory instantly became a symbol of American patriotism” (Ground Zero Spirit, n.d.).



Figure 9. Raising the Flag at Ground Zero: Ground Zero Spirit (From Franklin, 2001).

Franklin’s photograph is reminiscent of the Iwo Jima Memorial which is synonymous with the Marines, heroism, patriotism, and victory (Figure 10). Based upon the original flag raising photograph by AP photographer Joe Rosenthal, the Iwo Jima Memorial’s “official name is the Marine Corps War Memorial and it depicts the famous

---

<sup>4</sup> The official name of this photograph is “Ground Zero Spirit.”

flag raising on Iwo Jima during World War II. The memorial is dedicated to all Marines who have given their lives in the defense of the United States since 1775” (Visiting DC, n.d.).



Figure 10. Iwo Jima Memorial in Arlington, Virginia (From Visiting DC, n.d.)

Consequently, Franklin’s image capitalized and renewed the feelings of patriotism and victory that were part of the World War II American zeitgeist. While memorable flag raisings and nationalistic sentiments predate 9/11, the combination of time, place, people, and circumstance elevated the “Raising the Flag at Ground Zero” photograph to a mythical status. In essence, the photograph captured a contemporary version of the post-9/11 American spirit.

Firefighters are universally recognized as American heroes. Is it because they risk their lives while fighting fires and saving the lives of others? Hartley (1982) posits that the general population exhibits a personal interest in elite personalities because their actions are more consequential than that of ordinary people. The thinking is ordinary people are boring, whereas, the media elite are exciting and represent a socially desirable in-group. Myths created by the media elite demonstrate the inner workings of society by dramatizing society’s cultural norms and values. One researcher suggests that society’s myths are “essential parts of the general system of messages that cultivates prevailing outlooks (which is why we call it culture) and regulates social relationships” (Gerbner &

Gross, 1976, p. 173). Myths also “allow a society to use factual or fictional characters and events to make sense of its environment” (Hartley, 1982, pp. 29–30).

Human nature drives us to seek methods by which we can control our environment and make life predictable. In the days and weeks following 9/11, the most prominent images focused on the trials and tribulations of firefighters working at ground zero. People receive comfort in the knowledge that heroes still exist; they were comforted with the knowledge that firefighters were at work trying to help others. By perpetuating socially constructed belief systems, the media stereotypes firefighters in an attempt to satisfy the public’s internal desire for safety and security. Similarly, Holloway & Fullerton (1994) suggests that people repeatedly expose themselves to graphic imagery in order to overcome feelings of terror and vulnerability. They seek cognitive desensitized to disturbing graphic images. Consequently, the repeated exposure to dramatic firefighting imagery may help pacify the fear, anxiety and uncertainty that exist within an unpredictable world.

Social identity theory suggests that people are internally motivated to make sense of their environment by seeking an affiliation with mythologized in-groups by adopting their character traits. The firefighters immortalized within “Raising the Flag at Ground Zero” have been labeled heroes by society and mythologized by the media. The culturally determined subjective interpretation associated with Thomas Franklin’s photograph also coincides well with a pre-existing “hero firefighter” stereotype. Repeatedly broadcasting Franklin’s imagery across different media channels has only served to reinforce the hero mentality both within and without the fire service. This represents a significant hurdle for leaders hoping to introduce more culturally benign attitudes and actions within the fire service. The challenge becomes twofold; not only must leaders introduce new ideas but, they must also mitigate detracting media influences associated with a self-perpetuating persona that firefighters find rewarding.

#### **D. FIREFIGHTERS AS AMERICAN ICONS**

Societal expectations for firefighters are founded upon an objectified knowledge base applied to a collectivity of individuals; a knowledge base that group members have

cognitively internalized. Once in a firefighter's uniform, individuals strive to meet the societally prescribed role personification of a firefighter and assume the social identity defined by their group affiliation. Consequently, we must contextually recognize the actions a firefighter takes as correlates with the institutionalized role expectations of society. Individual decisions are not only made from a logical perspective, but also repeatedly validated from the cognitive framework established after assuming a firefighters' role typification.

Firefighter hero personifications are present in a multitude of symbolic imagery. Some images are simple graphic representations of respect and gratitude, while others represent greater levels of complexity in a search to understand the human condition. We can see character personifications in some surprisingly varied media types. One researcher suggests that as certain "ideological messages pass from one person to another, or from one medium to another, the ideas they contain are embellished, reinforced, and extended" (Lull, 2000, p. 27). For example, Figure 11 illustrates a true American hero, Superman, giving the "heroes of September 11, 2001" a moment of tribute and respect. I suggest images such as this tend to reinforce the ideological "hero firefighter" message.



Figure 11. Superman and the Heroes of September 11, 2001 (From Ross, 2001)

When discussing our “media-induced reality,” Barry states, “[w]hen projected images are combined with effective cultural symbols like the American flag or Arlington National Cemetery, and powerful emotional icons...the positive valence increases and the emotional effect becomes even more powerful” (Barry, 1997, p. 177). We can see this reality when examining how several firefighter images are displayed.



Figure 12. Fallen Hero (From Tracy, 2007)



Figure 13. Angelic Firefighter Ice Sculpture Fire and Ice (From Racicot, 2002)

For example, we see American flags at funerals, hung between two aerial ladders (Figure 12); we see firefighters raising flags at the World Trade Center (WTC) site (Figure 9); we see a firefighter hanging his head in sorrow, holding an American flag and being comforted by an angle (Figure 13); or receiving the respect of an idealized American hero like superman (Figure 11). In every case, associating common American icons with firefighters elicits powerful emotional responses in both firefighters and the public; it reinforces the expectation of what firefighters should be.

#### **E. FIREFIGHTERS AND TELEVISION**

Ideas and slogans expressed on television have a way of transcending cultural spheres as they become mainstreamed. For example, most everyone is familiar with Arnold Schwarzenegger's famous line in *Terminator 2: Judgment Day*, "Hasta la vista, Baby." This phrase has been integrated and modified by society to meet the needs of

individuals as they express themselves. As media quotes are repeated, they become socially accepted and validated. We blindly accept the reality presented without questioning its foundation or etiology. Gerbner and Gross (1976) supports the American public's television complacency in maintaining the status quo by stating, "It is an agency of the established order and as such serves primarily to extend and maintain rather than alter, threaten, or weaken conventional conceptions, beliefs, and behaviors" (1976, p. 175).

Thus, as ideas and slogans from specific sections of society are popularized throughout the mass media, the concepts and traditions they represent may become reinforced within their original circles of use.

Firefighters typify the blue-collar spirit of the American working class. Lull (2000) points out, "[t]he working class is commonly saluted on American Television" (Lull, 2000, p. 22). A popular FX program, *Rescue Me*, illustrates America's infatuation with the working class firefighter. Nielsen ratings from June 28 to July 4, 2010, exemplify the series popularity when it opened its sixth season with an average of 1.9 million viewers (Levin, 2010). Below are several quotes from *Rescue Me* that coincide with several traditional cultural firefighting themes. I suggest that the following quotes might help solidify the opinions, attitudes, and beliefs held by firefighters and the American public today.

#### Probie Firefighters:

Tommy Gavin: "Probies are treated like probies for a reason! They're treated like shit so they have to earn our trust and respect, so we know we can trust them in the face of a goddamn fire!" Season 4 / Episode 6: *Balance* (Sharetv, n.d. a).

Tommy Gavin: "Can you believe this kid? Jesus Christ! All the seniority I have over him and he's talkin' to me like that?" Season 4 / Episode 6: *Balance* (Sharetv, n.d. a).

#### Veteran Firefighters as teachers:

As Tommy Gavin explained to new firefighters why a fellow firefighter became chief, he said: "you know why? So he could teach assholes like

you, and you, what the job was really about” Season 4 / Episode 4: *Pussified* (Sharetv, n.d.a).

Pride in the job:

Tommy Gavin: “There isn’t a job on the whole goddamn planet I’d rather do that this one... Season 2 / Episode 11: *Bitch* (Sharetv, n.d. b).

Job Hazards:

Chief Jerry Reilly: “Hey pal, I’m a New York City fireman. My whole life’s a goddamn gamble.” Season 1 / Episode 1: *Guts* (Sharetv, n.d. c).

Attitude:

Tommy Gavin: “We’re not in the business of making heroes here. We’re in the business of discovering cowards, ‘cause that’s what you are if you can’t take the heat. You’re a pussy, and there ain’t no room for pussies in the FDNY.” Season 1 / Episode 1: *Guts* (Sharetv, n.d. c).

Simply put, the media plays a significant role in the consciousness formation of firefighters. A media researcher suggests that society’s consciousness “broadly reflects the dominant subject and patterns of mass-mediated ideological representation” (Lull, 2000, p. 29). In the case of firefighters, the media shapes their consciousness through the use of infectious inculcations as represented in the *Rescue Me* quotes. The ideas expressed legitimize certain ideals and make them more benign.

So, what is the significance of media perpetuated firefighter quotes? What messages do the *Rescue Me* quotes send? What is their impact? I suggest that when young firefighters see and hear fire service culture, as typified in *Rescue Me*, many cultural preconceptions about “the way things should be” become validated. Even if firefighters disagreed with the messages of *Rescue Me*, they would only do so after comparing the expressed ideas to the cultural reality they know and live. Thus, in some small way, they always internalize some aspect of the media’s portrayal of firefighters.

## **F. T-SHIRT IMAGERY**

The graphic images seen on firefighter T-shirts focus on prevalent fire service cultural traits and attitudes. Some common themes blatantly perpetuate the hero

firefighter role and reinforce the dominant ideology behind this stereotype (Figures 14). Others reinforce dangerous behaviors that impact both the lives of firefighters and civilians alike (Figures 15 and 16).



Figure 14. Real Firefighters. Real American Idol (From Firefighter, n.d. a); Heroes Are (From Firefighter, n.d. b)

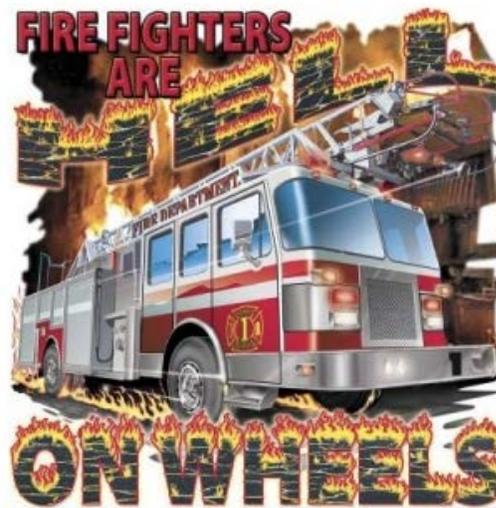


Figure 15. Driving Apparatus: Real Firefighters (From Firefighter, n.d. a); Hell On Wheels (From Firefighter, n.d. b)



Figure 16. First Due: If You Ain't First Due (From Firefighter, n.d. a); If You Can Read This (From Firefighter, n.d. b)

By combining people, situations and cultural expectations, images can evoke emotions founded in a well-defined history that is steeped with tradition. The imagery's powerful effect upon the human psyche comes not from the actual elements captured but, the symbolism and expectations captured within the imagery. Key elements are repeated that both firefighters and the general public can understand, thus, substantiating a behavioral pattern that becomes reality. For example, "traditional firefighters are fond of saying, "We run into burning buildings while other people are running out"—a line reflecting the ethic of aggressive departments" (Chetkovich, 1997, p. 21). This ideal is captured quite effectively in T-shirts that support a no failure attitude (Figures 17, 18, and 19), an attitude that might have contributed to the deaths of 343 firefighters on 9/11.



Figure 17. Success at any Costs: Failure Is Not an Option (From Firefighter, n.d. a);  
No Surrender (From Firefighter, n.d, a)

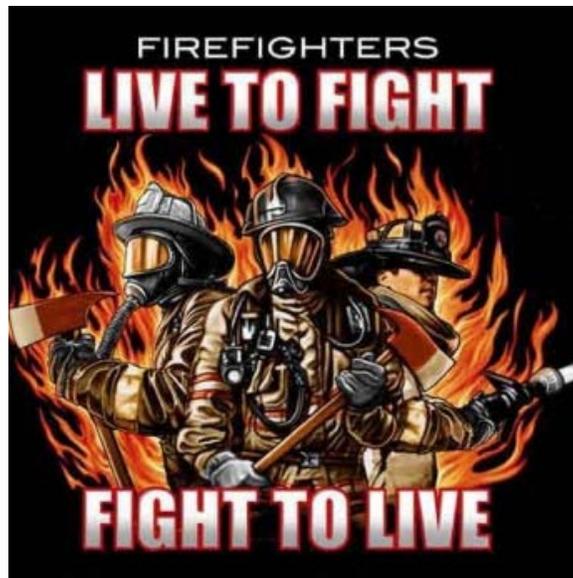


Figure 18. Fight To Live: Live To Fight (From Firefighter, n.d. b)



Figure 19. Real Men Don't Run (From Firefighter, n.d.a)

Many cultural traits are embodied within firefighter T-shirts such as: aggressiveness (Figure 20), loyalty (Figure 21), brotherhood (Figure 22 and 23), self-sacrifice (Figure 23) and heroism (Figure 24).



Figure 20. Aggressive Attack (From Black Helmet, n.d.)



Figure 21. Loyalty Above All Else Except Honor (From Firefighter, n.d. a)



Figure 22. Firefighter Brotherhood, the Real Family (From Firefighter, n.d.)



Figure 23. Brotherhood, Tradition and Sacrifice: Brotherhood, Tradition Sacrifice (From Black Helment, n.d.); Sacrifice Beyond the Call of Duty (From Firefighter, n.d. b)



Figure 24. American Hero (From Fireswap, n.d.)

As seen in Figure 24, two ideas have been combined to define the true American hero. In this case, Babe Ruth “the Bronx Bomber” is combined with two firefighting icons—a leather helmet and an axe—to suggest that history, traditions and American legends define heroism.

The illustrations presented here are generally visually unsophisticated; however, while the art's composition may appear simplistic, the cultural traits represented are highly complex. The ideas presents may be seen as “a form of amplification through simplification” (McCloud, 1994, p. 30). One author states “[c]reated images...amplify what is of significance to humans by paring down superfluous detail and by focusing on what is meaningful in experience” (Barry, 1997, p. 79). By removing distractions, we are better able to identify with the characterization being presented. For example, even though a primitive cave drawing or child's artwork may appear simplistic in nature, the imagery is actually quite complicated, in that; an observer can easily grasp the artwork's core meaning. Similarly, even though these T-shirt images lack visual complexity, they still accurately capture specific, recognizable cultural themes that are anchored in reality.



Figure 25. First In, Last Out: First In, Last Out—Skull (From Black Helmet, n.d.);  
First In, Last Out—Bulldog (From Firefighter, n.d.b)

While the images on firefighter T-shirts may be seen as grounded in both the historical and cultural reality of firefighters, as a form of symbolic communication, the images capture the essence of individual and group attitudes and opinions; they represent internally consistent cognitive realities. For example, the following captions were associated with the figures listed above:

- Figure 20 “Grab the nozzle and get in there... If you’re standing outside, it might as well be a dumpster fire” (Black Helmet, n.d.)
- Figure 23 (Brotherhood, Tradition, Sacrifice image) “Brotherhood, tradition, and sacrifice. In the fire service, you can’t have one without the others. Our tradition is our brotherhood and sacrifice” (Black Helmet, n.d.).
- Figure 25 (Skull image) “Nobody wants to be second due. That’s why you sit on that nozzle while you mask up. Be the first in and hold the line till it’s all over” (Black Helmet, n.d.).

So, is the “Aggressive Attack” (Figure 20) or “First In, Last Out” (Figure 25) imagery a deadly characterization of reality? McCarl (1985) might think so in that he sees firefighter aggressiveness as a potential fire ground problem. He states that veteran officers “occasionally make unnecessary or potentially dangerous demands” based upon their attitude (McCarl, 1985, p. 127). Unfortunately, many firefighting T-shirt may only serve to propagate potentially unsafe attitudes and behaviors.

Firefighters may live vicariously through graphic and media driven imagery. Wearing culturally expressive T-shirts may be one method by which firefighters meet their need for a positive self-esteem. Barry states, “[t]he way we picture the world and ourselves in relation to it is the very core of our identity” (1997, p. 102). T-shirt images publicly broadcast a psychologically desirable behavior to two important audiences: an individual’s affiliated peer group and the non-fire service masses. For firefighters, the messages reinforce “the way things should be” or “the way we’ve always done things.” They may act to gratify some internal need by stating, “I am the hero firefighter.” For the public, the messages serve to reinforce preconceived socially accepted stereotypes.

The behavioral patterns illustrated represent a collective’s desire to meet the demands of a hero hungry audience and the expectations of a socially defined identity. The danger here it two fold. First, a possibility exists that the imagery represents the dominant ideology of the group. In this case, the imagery serves to reinforce existing normative group behaviors. Second, as outlined by Barry, “media-induced vicarious experience may later mix with actual occurrences in memory and render them indistinguishable from one another” (1997, p. 67). In this latter case, firefighter

behaviors will no longer be bounded by reality. Instead, real life behaviors will mesh with those of superheroes penned in comic books and silk-screened on T-shirts.

**G. SUMMARY: A TALE FROM TWO PERSPECTIVES**

My initial shock had now become sobering reality. Not only did outsiders have a distorted image of fire fighters, but the men themselves were living one life and apparently believing another.

—McCarl, 1985, p. 33

This thesis has examined aspects of firefighter culture and tradition from two perspectives: internally from within the fire service and externally by examining how the public and popular media impact and perpetuate fire service culture. Both perspectives play upon the fire service's proud traditions of bravery and courage. Understanding how these two perspectives influence firefighters' cognitive frameworks is crucial when attempting to understand how leaders might modify questionable decision-making paradigms and behaviors.

The existing cultural orientation of society and the fire service both serve to encourage current firefighter behaviors by exploiting their primary psychological need for social acceptance and self-esteem. This psychological reality presents two significant philosophical maxims when attempting to institute organizational change processes. First, the public has a distorted concept of firefighting culture. Second, all firefighters were once members of that culturally misguided public. In other words, leaders must acknowledge that the tainted perspective many rookie firefighters begin their careers with will only become solidified over time, as junior firefighters become veterans. Consequently, without properly addressing and mitigating the dominant ideological messages embodied within firefighting culture and society, instituting organizational change processes will remain very difficult.

## VI. DISCUSSION

### A. INTRODUCTION

Leadership! To be accepted by my peers implied that I understood the history and culture of those with whom I rode the back end of a fire pumper. It is difficult to lead people without understanding their past and how they came to be where they are.

—Battalion Chief John Salka (2005, p. xvii)

In a search for increased efficiency, effectiveness, and productivity within the workplace, contemporary leadership theories have stressed the need for collaborative work practices and distributive leadership. The notion of a single, heroic leader guiding organizations into the promised land provides an appealing image that stimulates people's imagination; however, this image may be conceptually outdated and impractical within today's complex social environment that frowns upon autocratic leadership doctrines. A heroic leader out front, directing his or her people, may also result in people being alienated or left behind as the leader may become disconnected from his or her followers. Establishing strong social relationships within the leadership process must, therefore, be recognized as a critical component of leading. Leaders must be accepted and valued by their followers by building strong trusting relationships before they can lead.

No single person is equipped to carry out all leadership roles within their work environment. Natural scientists have recognized significant and powerful emergent properties within nature for years. Mother Nature routinely capitalizes upon disparate components coming together, interacting, and functioning as one cohesive unit. Human nature has been slow to capitalize upon this realization. It is about time that organizational leaders take advantage of this inherent organizational strength.

There are multiple informal or distributive leadership processes occurring within workplaces around the globe. Individuals fulfilling diversely different organizational roles routinely influence their coworkers in one manner or another. In its simplest form,

this influence is leadership. New era leaders need to recognize this emergent leadership property and disassociate themselves from the rigid hierarchical leadership models they typically employ.

Traditional notions of transformational leadership look at follower motives and seek to satisfy those needs through the leadership process. Leaders seek to engage “the full person of the follower” (Burns, 1978, p. 4). Follower needs exist in the form of individual or cultural values, beliefs, or goals. Cultural change will only occur gradually as perceptions and expectations incrementally change. The intent of the leadership process is to meet the goals of both the leader and follower mutually. Leaders drive change through educational processes that is mutually beneficial to both leader and follower. Followers support the process by participating and providing constructive input and feedback. The mutuality of these processes must involve some sort of social interaction as the leader seeks to understand the followers’ needs. When leaders are removed from this interaction, either through intentional or inadvertent means, the process will likely fail.

Fulfilling follower needs is frequently a very difficult process. A widespread and persistent fault in many leaders is trying to solve complex contemporary problems with simple anachronistic solutions. Albert Einstein unwittingly identified this leadership tendency by stating. “We can’t solve problems by using the same kind of thinking we used when we created them.” (n.d.) Changing outdated thinking process involves having a vision of the future; a vision of what the future workplace environments could look like with a little hard work. In Marcus et al.’s (2006) discussion of meta-leadership, this workplace environment related to an external inter-organizational or inter-agency environment. They suggested that the tendency towards “self-protectiveness, insularity, and allegiance to...agency-based advocacy and independence” (Marcus et al., 2006, p. 129) creates self-absorbed organizations; thereby, inhibiting effective multidimensional, multiorganizational problems solving strategies.

Minimizing the resistance to organizational change within the fire service may best be served by re-framing Marcus’ inter-organizational leadership deficiencies within an intra-organizational context (2006). Just like state and federal government agencies,

local fire departments are repeating the same leadership errors but at a local level. Change process are slow in coming and often resisted. I suggest that this organizational resistance was due to the intra-organizational culture present within the fire service. It exists at two levels—labor and management. The friction between these two groups is sometimes representative of the abrasive inter-organizational relationships described by Marcus. He characterized inter-agency struggles as “long-standing traditions of rivalry and palpable struggles for control” (Marcus, Dorn, & Henderson, 2006, p. 129). The fire service is no different.

Unfortunately, fire departments too often eagerly adopt new programs as a means to solve their problems “because that’s the way it’s always been done” (Gassway, 2005). Many organizational leadership and decision making training programs and strategies represent nothing more than intellectual fads; they seem more like alphabet soup—Total Quality Management (TQM), Management by Objective MBO, than they do organizational strategies; they are the simple solutions to complex problems.

So, a fundamental paradox may exist within the fire service leadership community at large. Fire service leaders espouse the need to keep firefighters safe while meeting the needs and expectations of contemporary society. According to organizational leaders, fire department safety, preparedness levels, and response capabilities have been increased through advances in technology, training, and equipment. Yet, after action reports continually illustrate the same organizational and system-wide deficiencies. So, while our physical and financial preparedness efforts show improvements, our actions more closely resemble a status quo way of doing business that is seriously flawed, outdated, dangerous, and inefficient. Understanding the rationale behind this disparity may provide leaders effective guidance to solve system wide deficiencies that will be readily accepted and incorporated by organization’s members.

Accepting responsibility and failure is a difficult pill to swallow. Organizational change barriers may result when people fail to accept personal responsibility for proposed structural change strategies. Admitting that our actions have been ineffective is to question our competence and professionalism as leaders. Rigidly grasping existing structural management paradigms is easy. Blaming individuals who fail to meet

organizational expectations after attending training programs is also easy; however, both of these approaches are inaccurate and ineffective. Leaders need to approach change with a new creative perspective. Leaders need to realize that change strategies stressing policies and procedures which focus solely on employee behavior have proven unsuccessful. While some changes may be conceptually welcomed, they may be “interpreted as idealistic,” and hence resisted (Holmes & Gifford, 1997, p. 15). Instead of directly instituting change mechanisms that mandate an expected behavior, a better approach might involve attempting to understand and address the problem’s context. Leaders need to understand their decisions from the point-of-view of whom it affects and why. Leaders need to understand how people feel, what they think, and the social pressures that serve to resist change processes.

Varied elaborations of culture influence how individuals perceive, comprehend, and behave within society. Unfortunately, not all risk assessment and decision-making processes have a rational foundation (Mileti, 1999). For example, certain groups may show a propensity towards risk taking behaviors that other groups might find unacceptable. Some groups might see change processes and modernization as a means to meet contemporary challenges while others may see such changes as unnecessary or threatening. Some people may see rules as absolutes while others see them as mere guidelines. Every varied cultural conceptualization has the potential to influence how organizations carry out their duties. In the fire service, cultural variances have the potential to minimize injuries, the loss of life, and property damage resulting from significant incidents or disasters. They also have the potential to make fire departments much more efficient, effective, and productive in carrying out their local homeland security missions.

To be effective, leaders must work within the existing cultural environment and utilize its inherent strengths. The discussion of culture within this thesis was designed to highlight the significance of the firehouse social environment. From this discussion, it was shown that, through complex social interactions, organizational culture defines expectations, gives guidance, maintains social order, and generally provides the unifying framework for the organization. And within this framework, senior firefighters provide

the re-enforcing structural support system. Therefore, understanding and leveraging the influential social forces wielded by senior firefighters becomes the key to instituting long-standing organizational change within fire departments

## **B. THE FIREHOUSE SOCIAL CONTROL PROCESS**

A large part of all human activities are social in nature. Human actions and behaviors do not occur in isolation; they may be seen as affecting or influencing the actions and behaviors of other individuals; they may be seen as altruistic or self-serving. Whatever the perspective taken, behaviors must ultimately be viewed as an effect of some larger social control process. One author articulates:

The observable social order is created by social control processes, that is, the efforts people take to shape one another's behavior. To achieve their goals, people and groups, organizations and nations constantly try to control what others do, using any techniques or resources they can muster. (Goode, 1978, p. 2)

If we accept this perspective, we might see the culturally defined actions and behaviors around fire stations as a set of social control mechanisms. Good behaviors are rewarded while bad behaviors are criticized or reprimanded. Social prestige is given or taken away from individuals, by group members, when individual actions do not meet the group's expectations.

## **C. ORIGINS OF FIREFIGHTERS' COGNITIVE FRAMEWORKS**

Two critical themes may be pared from the development and conceptualization of firehouse culture provided within this thesis: risk perception and risk taking. These themes might more aptly represent how firefighters think and act within the cultural confines of their work environment. Leadership proposed change process, therefore, would benefit by understanding the cultural etiology and complexity influencing how firefighters think and act.

### **1. The Perception of Risks**

The perception and comprehension of risk varies across individuals and society. There is overwhelming evidence that "people typically are unaware of the hazards they

face, underestimate those of which they are aware, overestimate their ability to cope when disaster strikes, [and] often blame others for their losses” (Mileti, 1999, p. 136). While there are complex technical definitions of risk, one author suggests that risk has simply become “a decorative flourish on the word ‘danger’” (Douglass, 1996, p. 40). However, risk also has a social dimension. Different environmental contexts shape the perception and sources of risk. The social meaning of risk may reflect expectations embedded within an organization’s cultural assumptions (Holmes & Gifford, 1997). Psychological debates over risk provide us little direction when describing society’s risk taking propensity. Just like cultural diversity, it must be recognized that societies have differing values which impact decision-making processes: some may value self-sacrifice over self-interest; some may value purity of motive over compromise (Douglass, 1996). It is therefore very difficult to evaluate the morality of actions involving risk.

Avoiding danger might be seen as a logical humanistic approach to living. Employers frequently incorporate technological innovations and institute training programs into the workplace to improve awareness, safety, and efficiency. People call upon inherent defense mechanisms to protect them from harm. Psychologists might base inherent defense mechanism assumptions upon concepts like motivation, rationalization, or a simple desire for self-preservation. However, anecdotal evidence does not support such perspectives. While some people are risk adverse, others routinely risk their lives to acts of entertainment such as flying planes, sky diving or motorcycle racing. We might surmise that the psychological and actual approaches to risk represent two distinct cultural approaches to life, a risk adverse approach and a risk seeking approach; however, neither approach suggests a moral imperative towards or against risk.

Although multiple strategies have been taken to improve workplace performance and risk perception, leaders generally do not take into consideration the social contexts of risk (Dwyer, 1991). Leaders must recognize that decision-making processes are often seen as a process of social comparison. People question if they made the right decision or ask what someone else would have done in a comparable situation. Research suggests that when people are unsure of their choices, they will seek social affiliation with others in an effort to substantiate their choices through a social comparison process (Gilbert,

Fiske, & Gardner, 1998). When it comes to risk, people make similar social comparisons. People generally believe they are less likely to be impacted by the negative consequences associated with risk; they “evaluate their own risk in comparison to how at risk they imagine others to be” (Joffe, 1999, p. 7). While such comparisons are always made against the average person, simple statistics tell us that not everyone can be above the average. Therefore, people are unrealistically optimistic about their personal wellbeing when it comes to risk exposure. While optimism might be a desirable personality trait, it does not keep us out of harm’s way. Additionally, it provides us little guidance when attempting to understand how cultural factors shape an individual’s subjectivity towards risk.

The externalization of danger demonstrates the powerful social impact of group behaviors. People seek subjective explanations for tragedy and misfortune. They ask “Why did this or that happen?” Two common explanations are generally used. A moralistic approach might explain something as an act of God. The tragedy was due to fate, bad luck, or the person deserved the outcome. Such explanations alleviate decision guilt because the results were inevitable. An attributional approach might assign blame to the work of one’s adversaries (Douglass, 1996). There is “a tendency to blame undesirable events on individuals who are selected by their personal characteristics, without taking into account situational factors beyond these agents’ control” (Horlick-Jones, 1996, p. 66). When others are to blame, the stress and anxiety associated with personal responsibility is displaced. An additional benefit of an attributional assignment of fault would allow decision makers to justify their position, resist change, and maintain the status quo.

An attributional approach equally relieves risk takers and decision makers from any personal responsibility. Research suggests that people’s response to crisis is frequently “not me,” “not my group,” and “others are to blame.” Data from various social science disciplines including psychology, anthropology, history, and cultural theory all support this assertion. The dehumanizing nature of this response may be an attempt by individuals to protect their identities. It is immensely easier to ascribe “the other” as the cause for disaster than it is for one’s own group to assume responsibility. By

attributing others as the cause of disaster, groups are able to strengthen their sense of identity while questioning the significance of ‘the others’. This responsibility shift could be a means by which groups develop a sense of risk invulnerability (Joffe, 1999).

Leaders must make attempts to understand their organizations sense-making frameworks. Social representations theory has been used to understand the personal and social philosophies behind common societal events. It might best be described as a common-sense way of thinking or a philosophical perspective people utilize in their attempt to ascribe meaning to societal events. The theory emphasizes how belief systems develop and operate. Utilizing this approach, Joffe (1999) asserts that risk perceptions are not founded on an entirely truthful reality. Instead, “people are motivated to represent the risks which they face in a way that protects them, and the groups with which they identify” (Joffe, 1999, p. 10). This suggests that varied cognitive diagnostic criteria such as group affiliations and cohesiveness, as well as, cultural attributes such as norms, values, and beliefs may shape an individual’s risk taking perspectives. Consequently, understanding these criteria may provide some insight into change strategies that would effectively incorporate an organization’s social context.

## **2. Risk Taking Behaviors**

A leader’s responsibilities in promoting propitious organizational behaviors must first start by understand why people partake in risky behaviors and why individuals might jeopardize their personal safety, and that of others, in the process. Research has suggested that pernicious behavioral patterns originate from an individual’s concerns about the social perception of their actions. Societal perceptions impact all aspects of our lives from daily social interactions to promoting one’s self-esteem. Literature has termed this self-reflective tendency as self-presentation. It simply “refers to the processes by which people control how they are perceived and evaluated by others” (Leary, Tchividjian, & Kraxberger, 1994, p. 461).

By its very nature, risk assumption implies a level of choice. Self-presentation may take on either positive or negative connotations. For example, embarrassing situations might damage one’s social standing. Conversely, firefighters taking heroic

actions may reinforce longstanding positive societal perceptions. Individuals may even engage in self-deprecating actions when social etiquette demands negative self-presentations. Examples of this behavior might occur at a celebrity roast. Consequently, self-presentation is a normal part of our daily lives and an essential component of successful interpersonal social interactions.

To take a risk is to jeopardize something voluntarily or to place something of value at stake; it's a probabilistic expression of injury, danger, or loss potential. Many people believe firefighters do this every day; they place their lives at risk so that others may live. Research has shown that individuals are more likely to advocate extreme, or risky, positions when operating within group settings (Bem, Wallach, & Kogan (1965); Clark, 1971). A concept described as the cultural value of risk assumption presumes that society values and rewards risk takers over non-risk takers. Experimentation actually found that successful risk takers were attributed the most favorable personal traits and recognition over unsuccessful risk takers or conservative decision makers (Finney, 1978). The implications of this research suggest that successfully participating in risky behaviors increases the personal prestige of the risk taker amongst both his peers and society at large. Consequently, a positive social affirmation of well-established fire service cultural values occurs every time a firefighter takes actions equal to or, above those societally prescribed minimum standards.

When in groups, people make decisions about risk differently than when they are alone. In group settings, people frequently make riskier decisions. Consequently, risky behaviors were thought by early researchers to sometimes represent situational differences between individual and group decision-making processes. Researchers termed the behavior "risky shift" and provided multiple explanations including: conceptualizing the shift as a cultural value (Wallach & Wing, 1968); suggesting that risk takers were more confident (Collins & Guetzkow, 1964); while others attributed risky shift behaviors to either conformity or leadership (Brown, 1986). However, none of these explanations have been substantiated upon further investigation.

More recent research has re-conceptualized the risk taking behavior to include shifts towards either risk or caution. Group interactions frequently polarize group

members such that risk shifts go in either a positive or negative direction. We may conceptualize this behavior as a form of groupthink like that sometimes seen during a jury's deliberation processes. Group polarization may more aptly be described as the attitudes or decisions that fall outside the expected average within some given context. In other words, a disproportionate shift in opinion occurs because of some group interaction. Current thinking suggests that either social comparisons or persuasive arguments are the most likely mechanisms behind the shift phenomenon (Isenberg, 1986). The social comparison perspective is driven by an individual's desire to be deemed socially desirable. Supporting the social comparison explanation, Brown (1986) states:

For some problems one wants to be like everybody else, to conform to the central tendency; for others one wants to be on the risky side of the central tendency, though not so far out as to seem foolhardy; on some problems one wants to be on the cautious side, though not so far out as to seem cowardly. (Brown, 1986, p. 214)

Simple anecdotal evidence may support the social comparison theory as explained by Brown, in that; society generally sees risk taking behaviors as admirable qualities. For example, as young children, you may recall the admiration of friends when you played "Dare, Double Dare." Or, you may recall all the fanfare and glory bestowed up Evil Kenevil when he attempted to jump the Snake River. From a methodologically sound approach, many scientific studies have also supported the admirable quality perspective. People generally want to be thought of as above average. They conceptually perceive risk taking behaviors as positive qualities when comparing themselves to general reference groups (Brown, 1986).

Codol (1975) demonstrated this behavior on a very large scale by conducting numerous studies where people compare themselves to a reference group. When self-comparisons were made of valued traits and behaviors, people considered themselves like others but only a little bit better. The phenomenon was subsequently coined "superior conformity of the self."

The persuasive argument theory is a simple evaluation process considering the pros and cons of a particular choice. Possible choices are evaluated and the one choice with the most positive attributes is selected. While the persuasive argument theory may

prove helpful when attempting to explain thoroughly the risky shift phenomenon, it may not be relevant in all fire service risk taking contexts. While operational firefighters make many decisions, few choices actually entail formal group discussions. Fire ground behaviors tend to be more spontaneous. This approach, however, may be most applicable to the organizational management decision-making process where time and information gathering pervade the decision making process.

The net lesson of this risk taking discussion is again the existence of a social element within a ubiquitous component of fire service culture—risk taking. Leaders must recognize and account for this component within their organizations when trying to modulate behaviors. While the application of technical strategies such as modern personal protective equipment or advanced National Incident Management System (NIMS) training might seem like logical solutions to contemporary problems, individuals may devalued their significance and impact based upon varied social contexts.

#### **D. RECOMMENDATIONS**

##### **1. Rules, Regulations and Guidelines**

The goal of this thesis was to elucidate the intricacies of firehouse culture, to show how firefighters and society perpetuate the rites and rituals associated with firefighting culture, to explain possible causes behind those actions and behaviors, and to understand how cultural forces affect organizational performance and leadership. Assuming this perspective, leaders should recognize by now that they cannot effectively or efficiently guide their organizations by unilaterally instituting specific change-based or threat-based management policies. Identifying a particular organizational problem and developing rules, guidelines and training programs to solve the underlying issue is commonplace. On the surface this practice appears reasonable, effective, and appealing to many leaders; it is a traditionally accepted way of instituting change. While rules, regulations, and threats of discipline are tools of the trade, such measures do not ensure compliance with expected standards; in that, they are simplistic ways of problem solving that fail to incorporate the dynamic organizational complexities associated with culture.

Rules may require compliance with some arbitrary guideline like an element of common law, social etiquette, or a cultural norm. Rules may or may not be followed. They gain their prescriptive power not through brute force or threat of punitive action but by social acceptance and cultural hegemony. Consequently, rules may be seen as situationally manifested within an organization's power brokers. These power brokers may be either the formal authoritative leaders or the informal dominant ideological leaders.

Rules have a social component that many leaders overlook. Rules affect behavior through some type of social control process; they provide prestige, friendship, or threat of force that people understand, value, or avoid. Lull suggests that for rules to be effective, they must be "perceived by social actors as emotionally satisfying, culturally relevant, socially useful, or otherwise appealing" (2000, p. 89). Rules are wanted and needed within society; they gain social utility by allowing individuals to fit-in.

The impact and acceptance of unidirectional, top-down rule implementation is unpredictable. While formal authority to manage by edict is frequently bestowed upon organizational executives, such leadership approaches are unlikely to stimulate motivation or enthusiastic compliance in subordinate members. Such management approaches are usually void of beneficial social control mechanisms.

Both Lull (2000) and Goode (1978) have stressed the importance of positive social control mechanisms in behavioral regulation. Unfortunately, while organizational executives often provide their subordinates with a utopian vision and, rules designed to help achieve that vision, many leaders fail to provide the necessary positive force or power to drive organizational goal achievement. This occurs when there is a definitional disparity between some frequent conceptualizations of force and power. Managers want to force organizational members into rule compliance. This generally implies getting one's way by overcoming some intentional resistance; however, as stated earlier, compliance has a level of voluntary negotiability associated with the definition. The effect of power, on the other hand, may take many beneficial forms; in that, some forms of power may motivate willing followers to take action rather than forcing them to take action.

French and Raven (1960) defined five bases of social power within organizations: legitimate, coercive, reward, expert, and referent. The power bases were developed from the premise that social influence originates from a relationship between two people. Willing followers must recognize some meritorious traits or qualities within another (the leader), which would serve to motivate them to accept a definitive change. While compliance is still the end goal, compliance no longer becomes a matter of resistance but, rather, a positive affirmation of choice.

We might better understand the social dynamics associated with rules by examining a common fire service rule violation, that being, firefighters not wearing seatbelts. Most fire service organizations and their associated state governments have mandatory seat belt policies and laws respectively. And yet, firefighters still choose to ignore such rules and laws. While firefighters have a cognitive understanding of expected institutional standards, their behaviors represent conformance with some other, possibly social, framework. Evidently, some other form of communication is taking place that trumps the formal institutional messages being delivered through mandates.

Rules are created within ideological institutions of some sort. Rule acceptance, therefore, generally reflects at least a minimal acknowledgement and acceptance of the institution's authority (Lull, 2000). Within the institutional framework of society, Giddens (1984) suggests rules are composed of two constitutive elements: meaning and sanctioning. By understanding the social implications of "meaning" and "sanctioning," leaders may begin to understand why people dissimulate the reasons behind their actions.

Most individuals understand the meaning of rules and the consequences of rule violations. An individual may receive a speeding ticket and a hefty fine for exceeding the posted speed limit. Simple cause and effect relationships are perceptually easy for individuals to comprehend; however, what many leaders fail to understand is that conforming actions depend upon a rationalization process undertaken by an organization's subordinate membership. While a rule's meaning may seem clear, the sanctions for rule violations are not. Tailboard firefighters implicitly understand that wearing seat belts is mandatory; they also understand that rule violations may result in some sort of formal discipline. However, what fire service leaders do not understand are

the ancillary social penalties or rewards associated with simple organizational rule violations. For a tailboard firefighter, would a department reprimand exceed the benefit or sanction imposed by his affiliated social group when a rule is not disregarded? The answer to this question is not implicitly clear. It must be independently evaluated within the individual's social context. In other words, what consequential action more profoundly influences behavior, institutional penalties, or social sanctions?

## **2. Labor/Management Integration**

Internal organizational tensions may exist that inhibit organizational learning and progress. This thesis has highlighted the significance of the fire service's cultural embeddedness already. It must be acknowledged that group solidarity acts to protect established social norms. Change may be perceived as threatening to a group's social power brokers. Tenured group members may refuse to accept the validity and applicability of new ideas. Younger members, not wanting to challenge the established social order, act in unison to support the group's perceived decision. In essence, individuals legitimize their beliefs and deny change by drawing upon past values and assumptions (Lorsch, 1986). This commonality of thought, however, does not rule out the possibility of strategic change. It simply supports the concepts contained within the theory of incremental change. One author suggests, "the strategic development of an organization needs to be seen as building on current practice and managerial beliefs about organizational competences within a political and historical context" (Johnson, 1988, p. 75).

Instituting change is more complicated than simply altering one's leadership paradigm. Change must be incremental so as not to overtly challenge or violate established norms. We have seen how change is complicated by the necessity to incorporate current cognitive, social and political beliefs in the context of organization's governing cultural systems; systems that strive to preserve the status quo. Management researchers have shown that change may take place within the confines of an established system, but it infrequently occurs outside of the confines of the system (Grinyer & Spender, 1979). Therefore, establishing a guiding coalition of senior firefighters, who are

willing to exemplify and impart the desired behaviors, is required. Simply put, leadership and organizational learning failure will result when 1) no guiding coalitions are developed, or 2) the guiding coalition fails to see an acceptable end goal.

Overcoming cultural rigidity falls upon both organizational members and leadership. Research clearly illustrates that problems arise when the degree of change challenges the established social norms and basic group assumptions (Wilkins & Ouchi, 1983). While blame for organizational failures must be at least minimally shared between labor and management, it must be stressed that leaders have persistently failed to translate accurately a time-tested, advantageous knowledge base into institutionally integrated behaviors. Institutionalizing beneficial organizational policies involves more than maintaining good labor/management relationships. Only through cooperation and support of individuals within both labor groups and management can an organization facilitate a productive learning process designed to overcome the social controls impeding change. Change is impossible without organic organizational participation and learning (Mintzberg & Westley, 1992).

Static knowledge is embedded within veteran managers and line firefighters. As traditional philosophies and practices are passed on from one generation to the next, they are reaffirmed and justified through repetition. The generative transmission of existing knowledge may represent individual learning, but it does not represent organizational learning. It is simply the perpetuation of accepted beliefs, and resulting behaviors, which unfortunately minimizes the success of true organizational learning and progress. Organizational learning may be recognized when two contextualized activities occur: 1) new learning processes are internalized and accepted by organizational members and 2) new, different, or unexpected outcomes are achieved following traditional situations. By changing traditional management approaches, actions and outcomes no longer become suboptimal products of institutionalized processes.

An organization's social constitution does not have to limit organizational learning and knowledge creation. Recognizing an organization's internal power structure is vital to instituting any change processes. Management policies often reflect a general lack of understanding of the social mechanisms driving behavior. Policies are often

negotiated through collective bargaining agreements or simply instituted as a right of management. In either case, managers recognize policies as valid organizational directives. However, individual group members must be the agents of change. Neither labor representatives nor management representatives can force organizational learning to occur at the level of the individual.

Soliciting support from informal power holders must be recognized as a critical step in overcoming rigid social structures perpetuated when individuals seek personal fulfillment by strengthening their personal and social identities. Firefighters behave in predictable manners because their actions are familiar and supported by their cohorts. While leadership by mandate appears rational, it completely fails to recognize the overwhelming social forces resisting change. Bass and Avolio (1993) suggest that leaders must “understand and appreciate the “interweaving of continuity and change” for long-term purposes” (1993, p. 115). Policies, guidelines, training programs, and general decision-making process must, therefore, be collaboratively developed and worked through by organizational executives, labor representatives, and senior firefighters.<sup>5</sup>

Leadership is a social process. Distributing leadership authority and building personal subordinate relationships may be uncomfortable and unfamiliar to many leaders. To be successful, leaders must show faith, trust, and support in their subordinates; they must show a willingness to give concessions and work collaboratively. Leaders must articulate and exemplify desired changes; they must become organizational symbols of the culture they desire. Senior leaders must reconnect with their core constituency, that being, line firefighters. Management representation at fire stations through surrogate, midlevel management intermediaries is insufficient. If leaders resist the social environmental atmosphere present within the fire service, they are likely to alienate themselves from the dominant social structure or in-group. When this occurs, a highly complex adversarial relationship may develop causing leaders to face perpetual internal resistance since subordinates no longer see any social cognitive benefits in their labor/management relationship.

---

<sup>5</sup> It must be stressed that while labor unions formally represent groups of firefighters, unions do not necessarily represent the personal social interests of the individuals making up the firefighting contingency.

Some critics might see collaborative labor/management working relationships as an obvious or simplistic solution for implementing change. While the notion of a good labor/management working relationship is not a leadership epiphany, it is suggested for a specific reason. First, I believe few fire service managers fully buy into collaborative labor/management working relationships; they give the process good lip service, but they actually have very little emotionally or intellectually invested in the process. Second, the process is necessary to help facilitate the social learning process necessary for true organizational change.

An organization's cumulative knowledge base might be stored within its institutional modeling processes, or its schemata and scripts. Schemata are cognitive frameworks individuals use in the process of sense-making. Scripts are a sub-type of schemata and refer to events or stories (Anderson, 2000). Observers use these sense-making tools to help process information presented by their environments. This method of information processing and learning shapes the actions of all firefighters. Young firefighters observe "the way things are done" and listen to stories of heroic feats around the beanery table. The cumulated knowledge then becomes the subconscious framework used in future decision-making processes. If this cognitive framework is built upon a skewed reality, future decisions will likely be equally distorted. If an observer's environment presents obtuse information, inappropriate schemata, or scripts may be applied in the decision making process. In such a scenario, incorrect, benign, or pernicious decisions may result.

Social learning is based upon the principle of individual learning through observation and modeling (Bandura, 1977). Bandura suggested that when individuals are rewarded by complying with a specific behavioral pattern, they are likely to imitate that behavior in future situations (1977). The concepts incorporated within social identity theory suggest a similar reward type structure in that individuals assume a particular social identity because they are searching for some social-cognitive gratification like improved self-esteem.

Bandura (1977) also suggests that the behavioral patterns of individuals are most likely modified not through first-hand experience, but through the close observation of

others and their experiences. This observation process might be seen as a form of mentoring but without the formal structured relationship. The process has two negative implications that will impact positive learning and change. First, this is the same learning process that has put the fire service in its' current leadership dilemma. Second, the modeling process emphasizes the socially desirable behaviors that others should strive to achieve. In the fire service, we might recognize senior firefighters as informal models, in that, veteran firefighters exhibit behaviors and tell stories that other firefighter may emulate. Through this modeling process, junior firefighters experience a generative learning process that stresses socially desirable behaviors. Positive changes will only occur when the existing modeling process begins to stress new, socially supported behaviors that are defined by a progressive leader's vision of the future.

While leaders may easily recognize established cognitive schema within a subordinate group's decision-making paradigm, they may fail to recognize their own ritualized decision-making routines. Many such routines were developed and honed through years of mentorship and practical experience as organizational leaders rose through the ranks. Frequently used decision-making processes, therefore, represent the underpinnings of a leadership paradigm that defines an organization's strategic management process. Unfortunately, many leadership paradigms have become significant obstacles to effective change management in a manner similar to how the ritualized behaviors of firefighters resist management's change processes. In either case, the net effect is that change represents a violation of an individual's basic assumptions.

Embedding organic organizational change requires a new leadership paradigm. Leaders must depend upon veteran firefighter to model a vision consistent with contemporary fire service expectations. An organization's informal power brokers have the ability to institutionalize new behaviors and change culture by establishing new norms, values, beliefs, and assumptions. Culturally speaking, leadership mandates and big-stick management cannot compete with the effectiveness veteran firefighter modeling. Only when the desirable attitudes and behaviors are modeled by senior firefighter will organizational leaders ensure that future generations of firefighters develop the proper schemata and scripts. By properly utilizing senior firefighters,

organizational leaders have the ability to embed desirable organizational qualities relating to safety, respect, collaboration, and learning into the fire service's daily business of public service.

THIS PAGE INTENTIONALLY LEFT BLANK

## LIST OF REFERENCES

- Alder, M. & Fratus, M. (2007, June 1). *The impact of department culture on fireground safety*. Retrieved June 23, 2009, from [http://www.fireengineering.com/display\\_article/295037/25/none/none/Feat/The-Impact-of-Department-Culture-on-Fireground-Safety](http://www.fireengineering.com/display_article/295037/25/none/none/Feat/The-Impact-of-Department-Culture-on-Fireground-Safety)
- Anderson, J. (2000). *Cognitive psychology and its implications*. New York: Worth Publishers.
- Asch, S. (1955). Opinions and social pressure. *Scientific American*, 193(5), 31–35.
- Ashforth, B., & Mael, F. (1989). Social identity and the organization. *The Academy of Management Review*, 14, 20–39.
- Ashkenas, R., Ulrich, D., Jick, T., & Kerr, S. (2002). *The boundaryless organization: breaking the chains of organizational structure*. San Francisco: Josey-Bass.
- Baigent, D. (2001). *One more last working class hero: A cultural audit of the UK fire service*. Cambridge: Fitting-In Publications.
- Bain, G., Lyons, M., & Young, A. (2002). The future of the fire service: Reducing risk, saving lives. *The Independent Review of the Fire Service*. London: Office of the Deputy Prime Minister.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.
- Barney, J. B. (1986). Organizational culture: Can it be a source of sustained competitive advantage? *The Academy of Management Review*, 11(3), 656–665.
- Barry, A. (1997). *Visual intelligence: Perception, image, and manipulation in visual communication*. New York: State University of New York Press.
- Bass, B. (1990). *Bass & Stogdill's Handbook of leadership: Theory, research, and managerial applications*. New York: The Free Press.
- Bass, B., & Avolio, B. (1993). Transformational leadership and organizational culture. *Public Administration Quarterly*, 17, 112–121.
- Becker, S., & Eagly, A. (2004). The heroism of women and men. *American Psychologist*, 59(3), 163–178.
- Behling, O., & McFillen, J. (1996). A syncretical model of charismatic/transformational leadership. *Group & Organizational Management*, 21(2), 163–191.

- Bellavita, C. (2007). Changing homeland security: A strategic logic of special event security. *Homeland Security Affairs*, 3(2), 1–23.
- Bem, D., Wallach, M., & Kogan, N. (1965). Group decision making under risk of aversive consequences. *Journal of Personality and Social Psychology*, 1, 453–460.
- Bendick, M. (2008, April 1). *A fair shake*. Retrieved August 29, 2010, from [http://firechief.com/leadership/management-administration/fair\\_shake\\_0401/index.html](http://firechief.com/leadership/management-administration/fair_shake_0401/index.html)
- Bennis, W. (1959). Leadership theory and administrative behavior: The problem of authority. *Administrative Science Quarterly*, 4(3), 259–301.
- Bennis, W., & Nanus, B. (1985). *Leader: The strategies for taking charge*. New York: Harper & Row.
- Berger, P., & Luckmann, T. (1966). *The social construction of reality: A treatise in the sociology of knowledge*. New York: Anchor Books.
- Berger, T. (1996). Norms, identity, and national security in Germany and Japan. In P. Katzenstein, *The culture of national security: norms and identity in world politics* (pp. 317–356). New York: Columbia University Press.
- Bettenhausen, K. (1991). Five years of groups research: What we have learned and what needs to be addressed. *Journal of Management*, 17(2), 345–381.
- Bonnici, P., & Proud, L. (1998). *Designing with photographs*. New York: Watson-Guption Publications.
- Bower, M. (2003). Company philosophy: “The way we do things around here.” *McKinsey Quarterly*, 2, 110–117.
- Braddee, R. (2009). *Fire fighter fatality investigation #F2008–08*. Washington, DC: National Institute for Occupational Health and Safety.
- Brame, K. (1999, January 1). *Leadership: Fact or fiction?* Retrieved September 25, 2009, from [http://firechief.com/mag/firefighting\\_leadership\\_fact\\_fiction/index.html](http://firechief.com/mag/firefighting_leadership_fact_fiction/index.html)
- Brown, R. (1995). *Prejudice: Its social psychology*. Oxford: Blackwell.
- Brown, R. (1986). *Social psychology*. New York: The Free Press.
- Bruegman, R. (2002, August 1). *A matter of trust*. Retrieved September 25, 2009, from [http://firechief.com/mag/firefighting\\_matter\\_trust/index.html](http://firechief.com/mag/firefighting_matter_trust/index.html)

- Buckman, J. M. (2006). *Chief fire officer's desk reference*. Sudbury, MA: Jones and Bartlett
- Burke, P. (1991). Identity processes and social stress. *American Sociological Review*, 56(6), 836–49.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Cameron, k., & Quinn, R. (2006). *Diagnosing and changing organizational culture*. San Francisco: Jossey-Bass.
- Campbell, J. (2008). *The hero with a thousand faces*. Navato, CA: New World Library.
- Carley, K. (1991). A theory of group stability. *American Sociological Review*, 56(3), 331–354.
- Cartwright, D., & Zander, A. (1960). *Group dynamics: Research and theory*. Evanston, IL: Row, Peterson, and Company.
- Caruso, K., (n.d.) *Hero firefighter Chris Fields carries Baylee Almon*. Retrieved July 12, 2010, from <http://www.oklahomacitybombing.com>
- Chetkovich, C. (1997). *Real heat: Gender and race in the urban fire service*. New Brunswick, NJ: Rutgers University Press.
- Clark, R. (1971). Group-induced shift toward risk: A critical appraisal. *Psychological Bulletin*, 76(4), 251–270.
- Cloud, R. (2008). *Future role of fire service in homeland security*. Master's thesis, Naval Postgraduate School, Monterey, CA.
- Codol, J. (1975). On the so-called “superior conformity of the self” behavior: Twenty experimental investigations. *European Journal of Social Psychology*, 5(4), 457–501.
- Coleman, R. (2004, December 1). *Aesop's fables and firehouse culture*. Retrieved September 25, 2009, from [http://firechief.com/management/firefighting\\_aesops\\_fables\\_firehouse/index.html](http://firechief.com/management/firefighting_aesops_fables_firehouse/index.html)
- Coleman, R. (1999, February 1). *Can we forge firefighter camaraderie without hazing?* Retrieved September 25, 2009, from [http://firechief.com/mag/firefighting\\_forge\\_firefighter\\_camaraderie/index.html](http://firechief.com/mag/firefighting_forge_firefighter_camaraderie/index.html)
- Collins, B. & Guetzkow, H. (1964). *A social psychology of group processes for decision-making*. New York: Wiley.

- Collins, R. (1988). *Theoretical sociology*. San Diego, CA: Harcourt Brace Jovanovich.
- Cox, A. (2010) Engine 9 Ever Ready Hose Bed Cover, Seattle Fire Department, Seattle.
- Cox, S. & Flin, R. (1998). Safety culture: Philosopher's stone of man of straw? *Work & Stress*, 12(3), 189–201.
- Cramer, M. (2007, September 7). *Love infuses firefighter's rites: Tens of thousands salute a brother lost*. Retrieved July 12, 2010, from [http://www.boston.com/news/local/massachusetts/articles/2007/09/07/love\\_infuses\\_firefighters\\_rites/](http://www.boston.com/news/local/massachusetts/articles/2007/09/07/love_infuses_firefighters_rites/)
- Crawford, B. (2007, May 1). *To die for*. Retrieved September 25, 2009, from [http://firechief.com/leadership/firefighting\\_die/index.html](http://firechief.com/leadership/firefighting_die/index.html)
- Crocker, E. (1908, February). *Firefighter heroism quotes from history*. Retrieved April 18, 2010, from <http://www.firemuseumnetwork.org/misc/quotes.html>
- Deal, T. E. & Kennedy, A. A. (2000). *Corporate cultures: The rites and rituals of corporate life*. New York: Perseus Books Publishing, LLC.
- Deal, T. & Kennedy, A. (1982). *Corporate cultures*. Reading, MA: Addison-Wesley.
- DeFleur, M. (1964). Occupational roles as portrayed on television. *Public Opinion Quarterly*, (28), 57–74.
- Denison, D. (1985). Bringing corporate culture to the bottom line. *Organizational Dynamics*, 13(2), 5–22.
- Black Helmet. (n.d.) *Men's apparel*. Retrieved July 12, 2010, from [www.blackhelmet.com/shop-mens/](http://www.blackhelmet.com/shop-mens/)
- Dollinger, S. (1986). The need for meaning following disaster: Attributions and emotional upset. *Personality and Social Psychology Bulletin*, 12(3), 300–310.
- Donahue, A. & Tuohy, R. (2006). Lessons we don't learn: A study of the lessons of disasters, why we repeat them, and how we can learn them. *Homeland Security Affairs*, 2(2), 1–28.
- Douglass, M. (1996). *Risk and blame: Essays in cultural theory*. London: Routledge.
- Dwyer, T. (1991). *Life and death at work: Industrial accidents as a case of socially produced error*. New York: Plenum Press.

- Einstein, A. (n.d.). *Collected quotes from Albert Einstein*. Retrieved September 17, 2010, from <http://rescomp.stanford.edu/~cheshire/EinsteinQuotes.html>
- Elliott, D., Smith, D., & McGuinness, M. (2000). Exploring the failure to learn: Crises and the barriers to learning. *Review of Business*, 21(3), 17–24.
- Elliott, T. (2001, June 1). *Energize your department with idea management*. Retrieved September 25, 2009, from [http://firechief.com/mag/firefighting\\_energize\\_department\\_idea/](http://firechief.com/mag/firefighting_energize_department_idea/)
- Estrin, J.(2007) *Thousands gather in Brooklyn for firefighter's funeral*. The New York Times, New York. Retrieved February 14, 2012, from [www.nytimes.com/2007/06/27/nyregion/27funeral.html](http://www.nytimes.com/2007/06/27/nyregion/27funeral.html)
- Ethier, K. & Deaux, K. (1994). Negotiating social identity when contexts change: Maintaining identification and responding to threat. *Journal of Personality and Social Psychology*, 67(2), 243–251.
- Eveline, J., & Booth, M. (2002). Gender and sexuality in discourses of managerial control: The case of women miners. *Gender, Work and Organization*, 9(5), 556–578.
- Faludi, S. (2008, February 19). *What happened to the widows?* Retrieved September 9, 2010, from <http://guardian.co.uk/books/2008/feb/19/politics/print>
- Ferguson, S. (2006, December 1). *Audience command*. Retrieved September 25, 2009, from [http://firechief.com/training/ar/firefighting\\_audience\\_command/](http://firechief.com/training/ar/firefighting_audience_command/)
- Finney, P. (1978). Personality traits attributed to risky and conservative decision makers: Culture values more than risk. *The Journal of Psychology*, 99, 187–197.
- Fire 20/20. (2007). *Multicultural health & safety research report*. Retrieved June 26, 2009, from <http://www.fire2020.org/MHSRPRReportOnline/index1.html>
- Firefighter (n.d. a). *Apparel*. Retrieved July 13, 2010, from [www.firefighter.com/Firefighter-Apparel/Firefighter-Tshirts.cfm](http://www.firefighter.com/Firefighter-Apparel/Firefighter-Tshirts.cfm)
- Firefighter (n.d. b). *Apparel*. Retrieved February 15, 2012, from [www.firefighter.com/Firefighter-Apparel/Firefighter-Tshirts.cfm](http://www.firefighter.com/Firefighter-Apparel/Firefighter-Tshirts.cfm)
- Fireswap (n.d.). *Firefighter T Shirts*. Retrieved July 13, 2010, from [www.fireswap.com/category/Firefighter-Tshirts.html](http://www.fireswap.com/category/Firefighter-Tshirts.html)
- Fiske, J. & Hartley, J. (2003). *Reading television*. London: Routledge.

- Flickr. (n.d.) Retrieved July 28, 2011, from [www.flickr.com/photos/scoutnurse/3492781693/](http://www.flickr.com/photos/scoutnurse/3492781693/)
- Forsyth, D. (2006). *Group dynamics*. Belmont, CA: Thomson Wadsworth.
- Franklin, T. (2001) *Ground Zero Sprit*, The Record. Bergen County. Retrieved July 13, 2010, from <http://www.hispanianews.com/archieve/2004/09/09/9-11.jpg>
- French, J. & Raven, B. (1960). The bases of social power. In D. Cartwright, & A. Zander, *Group dynamics: Research and theory* (pp. 607–623). Evanston, IL: Row, Peterson and Company.
- Furnham, A. & Gunter, B. (1993). Corporate culture: Definition, diagnosis and change. In C. Cooper, & I. Robertson, *International review of organizational psychology* (pp. 233–261). Chichester: John Wiley.
- Gassway, R. (2005, February 1). *Some traditions haunt us every day*. Retrieved June 23, 2009, from [http://www.fireengineering.com/display\\_article/225636/25/none/none/Depart/some-traditions-haunt-us-every-day](http://www.fireengineering.com/display_article/225636/25/none/none/Depart/some-traditions-haunt-us-every-day)
- Gerbner, G. & Gross, L. (1976). Living with television: The violence profile. *Journal of Communication*, 26(2), 172–199.
- Gersick, C. (1988). Time and transition in work teams: Toward a new model of group development. *Academy of Management Journal*, 31(1), 9–41.
- Gersick, C. & Hackman, J. (1990). Habitual routines in task-performing groups. *Organizational behavior and human decision processes*, 47, 65–97.
- Giddens, A. (1984). *The constitution of society*. Berkeley, CA: University of California Press.
- Gilbert, D., Fiske, S., & Gardner, L. (1998). *The handbook of social psychology* (Vol. 1). New York: McGraw-Hill.
- Gilovich, T., Griffin, D., & Kahneman, D. (2002). *Heuristics and biases: The psychology of intuitive judgment*. Cambridge: Cambridge University Press.
- Giuliani, R. (2002). *Leadership*. New York: Miramax Books.
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory*. New York: Aldine Publishing Company.

- Globe. (2007) *West Roxbury fire: Memorials*. Retrieved July 12, 2010, from [http://www.boston.com/news/local/gallery/west\\_roxbury\\_fire\\_II?pg=4](http://www.boston.com/news/local/gallery/west_roxbury_fire_II?pg=4)
- Goleman, D., Boyatzis, R., & McKee, A. (2002). *Primal leadership: Realizing the power of emotional intelligence*. Boston, MA: Harvard Business School Press.
- Goode, W. (1978). *The celebration of heroes: Prestige as a control system*. Berkeley, CA: University of California Press.
- Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *The American Journal of Sociology*, 91(3), 481–510.
- Green, B., Wilson, J., & Lindy, J. (1985). Conceptualizing post-traumatic stress disorder: A psychological framework. In C. Figley, *Trauma and its Wake: The Study and Treatment of Post-Traumatic Stress Disorders* (pp. 53–69). New York: Brunner/Mazel.
- Grinyer, P., & Spender, J. (1979). Recipes, crises and adaptation in mature businesses. *International Studies of Management and Organization*, 9(3), 113–123.
- Ground Zero Spirit. (n.d.) *About the photo*. Retrieved February 14, 2012, from [www.groundzerospirit.org/about.asp](http://www.groundzerospirit.org/about.asp)
- Halberstam, D. (2002). *Firehouse*. New York: Hyperion.
- Haggerty, R., & Ryan, A. (2007) *A sea of blue salutes a fallen firefighter in West Roxbury*. Retrieved July 10, 2010, from [http://www.boston.com/news/globe/city\\_region/breaking\\_news/2007/09/a\\_sea\\_of\\_dress.html](http://www.boston.com/news/globe/city_region/breaking_news/2007/09/a_sea_of_dress.html)
- Hartley, J. (1982). *Understanding news*. London: Routledge.
- Henderson, B. (2002). Police work. *E-Journal of the Workplace Education Research Consortium*, 1–10.
- Hildebrand, J. (1984). Stress research (Part 2). *Fire Command*, 51(6), 55–58.
- HM Fire Service Inspectorate. (1999). *Equality and fairness in the fire service*. London: Home Office.
- Hogg, M. (1992). *The social psychology of group cohesiveness: From attraction to social identity*. New York: New York University Press.
- Hogg, M. & Abrams, D. (1998). *Social identifications: A social psychology of intergroup relations and group processes*. New York: Routledge.

- Hogg, M. & Abrams, D. (1999). Social identity and social cognition: Historical background and current trends. In D. H. Abrams, *Social identity and social cognition* (pp. 1–25). Malden, MA: Blackwell.
- Holloway, H. & Fullerton, C. (1994). The psychology of terror and its aftermath. In R. M. Ursano, *Individual and community responses to trauma and disaster: The structure of human chaos* (pp. 31–45). Cambridge: Cambridge University Press.
- Holmes, N. & Gifford, S. (1997). Narratives of risk in occupational health and safety: Why the ‘good’ boss blames his tradesman and the “good” tradesman blames his Boss. *Australian and New Zealand Journal of Public Health*, 21(1), 11–16.
- Holt, J. (2010, August 1). *Safety: Our actions must match our values*. Retrieved September 1, 2010, from <http://fireengineering.com/index/articles/display/1577311352/articles/fire-engineering/volume-163/issue-8/Features/Safety-Our-Actions-Must-Match-Our-Values.html>
- Horlick-Jones, T. (1996). The problem of blame. In C. J. Hood, *Accident and design: Contemporary debates in risk management* (pp. 61–71). London: UCL Press.
- Hornsey, M. (2008). Social identity theory and self-categorization theory: A historical review. *Social and Personality Psychology Compass*, 2(1), 204–222.
- Horvath, C. (2010). *Tactics of cultural change*. Fire Department Instructors Conference Online—Keynote speech. Retrieved May 8, 2010, from [www.fireengineering.com/topics/m/video/31232770/tactics-of-cultural-change.htm](http://www.fireengineering.com/topics/m/video/31232770/tactics-of-cultural-change.htm)
- Houska, B. (2010, May 1). *Speaking of safety: how safe is firefighting?* Retrieved September 1, 2010, from <http://www.fireengineering.com/articles/2010/05/houska-speaking-of-safety.html>
- Isenberg, D. (1986). Group polarization: A critical review and meta-analysis. *Journal of Personality and Social Psychology*, 50(6), 1141–1151.
- James, R. (2009). *Emergency vehicle safety in the Orange County Fire Authority: Are we meeting our mission?* Emmitsburg: National Fire Academy.
- Joffe, H. (1999). *Risk and “the other.”* Cambridge: Cambridge University Press.
- Johnson, G. (1990). Managing strategic change: The role of symbolic action. *British Journal of Management*, 1(4), 183–200.

- Johnson, G. (1988). Rethinking incrementalism. *Strategic Management Journal*, 9(1), 75–91.
- Jones, E., & Gerard, H. (1967). *Foundations of social psychology*. New York: Wiley.
- Jung, T., Scott, T., Davies, H., Bower, P., Whalley, D., McNally, R., Mannion, R (2009). Instruments for exploring organizational culture: A review of the literature. *Public Administration Review*, 69(6), 1087–1096.
- Kemah Fire Department. (n.d.). *Fire department traditions*. Retrieved August 15, 2011, from <http://www.kemahfire.com/traditions.asp>
- Kennedy, R. (1996, February 22). Changing a culture of courage. *New York Times*, p. B3.
- Kotter, J. & Heskett, J. (1992). *Corporate culture and performance*. New York: The Free Press.
- Lagnado, L. (2002, March 5). FDNY tries to rescue its own. *Wall Street Journal*, p. B1.
- Lasky, R. (2006). *Pride & Ownership: A firefighter's love of the job*. Tulsa, OK: PennWell.
- Leary, M., Tchividjian, L., & Kraxberger, B. (1994). Self-presentation can be hazardous to your health: Impression management and health risk. *Health Psychology*, 13(6), 461–470.
- Lee, T. (2007a, April 26). *Firefighter's symbol of pride gets image upgrade*. Retrieved August 18, 2010, from <http://www.nytimes.com/2007/04/26/nyregion/26patches.html?pagewanted=print>
- Lee, T. (2007b, June 27) *Thousands Gather in Brooklyn for Firefighter's Funeral*. Retrieved July 13, 2007 from [www.nytimes.com/2007/06/27/nyregion/27funeral.html](http://www.nytimes.com/2007/06/27/nyregion/27funeral.html)
- Lerner, M. (1980). *The belief in a just world: A fundamental delusion*. New York: Plenum Press.
- Levin, G. (2010, July 8). *Beyond Nielsen numbers: June 28-July 4*. Retrieved August 13, 2010, from [www.usatoday.com](http://www.usatoday.com): [http://www.usatoday.com/life/television/news/2010-07-08-nielchatter08\\_ST\\_N.htm](http://www.usatoday.com/life/television/news/2010-07-08-nielchatter08_ST_N.htm)

- Look, L. (n.d.). *Fire commentary: The culture of the firehouse*. Retrieved June 23, 2009, from [http://fireengineering.com/display\\_article/362264/25/none/none/BRNIS/Fire-Commentary:-The-Culture-of-the-Firehouse](http://fireengineering.com/display_article/362264/25/none/none/BRNIS/Fire-Commentary:-The-Culture-of-the-Firehouse)
- Lorsch, J. (1986). Manager's culture: The invisible barrier to strategic change. *California Management Review*, 28(2), 95–109.
- Lull, J. (2000). *Media, communication, culture: A global approach*. New York: Columbia University Press.
- Luthans, F. (1981). *Organizational behavior*. New York: McGraw-Hill.
- Madaras, G. & Bem, D. (1968). Risk and conservatism in-group decision-making. *Journal of Experimental Social Psychology*, 4(3), 350–365.
- Marcus, L., Dorn, B., & Henderson, J. (2006). Meta-leadership and national emergency preparedness: A model to build government connectivity. *Biosecurity and Bioterrorism: Biodefense strategy, Practice, and Science*, 4(2), 128–134.
- Marcus, L., Dorn, B., & Henderson, J. (2005). *Meta-leadership and national emergency preparedness: Strategies to build government connectivity*. Working Papers: Center for Public Leadership (pp. 41–64). Boston: Center for Public Leadership.
- Markley, R. (2008, September 1). 9–11 progress report. Retrieved September 25, 2009, from [http://firechief.com/leadership/incident-command/progress\\_report\\_0908/index.html](http://firechief.com/leadership/incident-command/progress_report_0908/index.html)
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98(2), 224–253.
- Marshall, J., & McLean, A. (1985). Exploring organisation culture as a route to organisational change. In V. Hammond, *Current research in management* (pp. 2–20). London: Francis Pinter.
- Martinelli, M. (n.d.). Retrieved July 28, 2011, from [nyfd.com/brooklyn\\_ladders/ladder\\_132.html](http://nyfd.com/brooklyn_ladders/ladder_132.html)
- McCarl, R. (1985). *The District of Columbia fire fighters' project: A case study in occupational folklore*. Washington, D.C.: Smithsonian Institution Press.
- McCauley, C. (1998). Group dynamics in Janis's theory of groupthink: Backward and forward. *Organizational Behavior and Human Decision Processes*, 73(2–3), 142–162.

- McCloud, S. (1994). *Understanding comics: The invisible art*. New York: HarperPerennial.
- McDonald, L. (2003, April 1). *Working under standards pressure*. Retrieved September 25, 2009, from [http://firechief.com/news/firefighting\\_working\\_standards\\_pressure/index.html](http://firechief.com/news/firefighting_working_standards_pressure/index.html)
- McQuail, D. (1977). The influence and effect of mass media. In J. G. Curran, *Mass communication and society* (pp. 70–94). London: Edward Arnold.
- Merinar, T., Bowyer, M., Tarley, J., & Jackson, J. (2009). *Fire fighter fatality investigation F2007–18*. Washington, DC: National Institute for Occupational Health and Safety.
- Mileti, D. (1999). *Disasters by design: A reassessment of natural hazards in the United States*. Washington, DC: Joseph Henry Press.
- Mintzberg, H. & Westley, F. (1992). Cycles of organizational change. *Strategic Management Journal*, 13, 39–59.
- Mitroff, I., Pauchant, T., Finney, M., & Pearson, C. (1989). Do (some) organizations cause their own crises? The cultural profiles of crisis-prone vs. crisis-prepared organizations. *Industrial Crisis Quarterly*, 3(4), 269–283.
- Moore-Merrel, L., McDonald, S., Zhou, A., Fisher, E., & Moore, J. (2006, September 30). *Contributing factors to firefighter line-of-duty death in the United States*. Retrieved March 10, 2010, from [http://www.iaff.org/tech/PDF/Contributing%20Factors%20to%20FF%20Line-of-Duty%20Death\\_IAFFand%20USFA.pdf](http://www.iaff.org/tech/PDF/Contributing%20Factors%20to%20FF%20Line-of-Duty%20Death_IAFFand%20USFA.pdf)
- Morgan, G. (1980). Paradigms, metaphors, and puzzle solving in organization theory. *Administrative Science Quarterly*, 25(4), 605–622.
- Morris, B. (n.d.) Retrieved July 13, 2010, from [www.ppinyot.com/transoceanic/eveready.gif](http://www.ppinyot.com/transoceanic/eveready.gif)
- Morris, G. (2005, May 1). *No excuses*. Retrieved August 29, 2010, from [http://firechief.com/health\\_safety/firefighting\\_no\\_excuses050105/index.html](http://firechief.com/health_safety/firefighting_no_excuses050105/index.html)
- My Hero. (n.d.). *Lifesavers*. Retrieved September 9, 2010, from <http://www.myhero.com/go/hero.asp?hero=firefighters>
- National Commission on Terrorist Attacks upon the United States. (2003). *Final report of the National Commission on Terrorist Attacks upon the United States*. New York: W.W. Norton & Company.

- National Fallen Firefighters Foundation. (n.d. a). *About the everyone goes home*. Retrieved December 11, 2009, from <http://www.everyonegoeshome.com/about/>
- National Fallen Firefighters Foundation. (n.d. b). *16 firefighter life safety initiatives*. Retrieved March 10, 2010, from <http://www.everyonegoeshome.com/initiatives.html>
- National Fallen Firefighters Foundation. (2004c). *Firefighter life safety summit initial report*. Emmitsburg, MD: United States Fire Administration.
- National Fire Protection Association. (2010). *Fire officer: Principles and practice*. Sudbury: Jones and Bartlett Publishers.
- New York City. (n.d.) Retrieved July 28, 2011, from [www.fortunecity.com/meltingpot/navarino/167/fdnypatches.html](http://www.fortunecity.com/meltingpot/navarino/167/fdnypatches.html)
- Nicholls, J. (1988). Transforming leadership in organizations: Bringing meta “visioning” into the macro leadership role. *European Management Journal*, 6(3), 269–276.
- Oakes, P., Haslam, S., & Turner, J. (1994). *Stereotypes and social reality*. Oxford: Blackwell.
- Ouchi, W. G. (1981). *Theory Z*. Reading, MA: Addison-Wesley.
- Page, D. (1935). Measurement and prediction of leadership. *American Journal of Sociology*, 41, 31–43.
- Pauchant, T. & Mitroff, I. (1992). *Transforming the Criss-Prone organization: Preventing Individual, organizational, and environment tragedies*. San Francisco: Jossey-Bass Publishers.
- Pearson, C. & Clair, J. (1998). Reframing crisis management. *Academy of Management Review*, 23(1), 59–76.
- Peters, T. & Austin, N. (1986). *A passion for excellence: The leadership difference*. New York: Warner Books.
- Peters, T. & Waterman, R. (1982). *In search of excellence: Lessons from America’s Best-Run Companies*. New York: Harper & Row.
- Peterson, K., Amandus, H., & Wassell, J. (2009, June 1). *Reducing firefighter vehicle crash fatalities*. Retrieved September 2, 2010, from <http://www.fireengineering.com/articles/print/volume-162/issue-6/features/reducing-firefighter-vehicle-crash-fatalities.html>

- Pettigrew, A. M. (1979). On studying organizational cultures. *Administrative Sciences Quarterly*, 24(4), 570–581.
- Phillips, D. (1992). *Lincoln on leadership: Executive strategies for tough times*. New York: Warner Books.
- Pollock, C., Paton, D., Smith, L., & Violanti, J. (2003). Team resilience. In D. Paton, J. Violanti, & L. Smith, *Promoting capabilities to manage post-traumatic stress* (pp. 74–88). Springfield, IL: Charles C. Thomas.
- Pondy, L. R., & Mitroff, I. I. (1979). Beyond open system models of organization. *Research in Organizational Behavior*, 1, 3–39.
- Popper, M. (2001). *Hypnotic leadership: Leaders, followers, and the loss of self*. West Port, CT: Praeger.
- Racicot, D. (2002). *Fire and Ice*. Retrieved February 14, 2012 from <http://www.snopes.com/rumors/photos/fireman.asp>
- Rhodes, J. (2006). *The fire service: History, traditions & beyond*. LaVergne, TN: Booklocker.com.
- Richardson, L. (2006, March 1). *Fire station pranks or harassment?* Retrieved September 2, 2010, from <http://articles.latimes.com/2006/mar/11/local/me-lafd11>
- Robertson, I. (1987). *Sociology*. New York: Worth Publishers.
- Ross, A. (2001) *Superman and the heroes of September 11, 2001*. Retrieved July 13, 2010, from <http://www.loc.gov/exhibits/911/911-comics.html>
- Routley, J. & Manning, W. (2007). 2007 National Firefighter Life Safety Summit. Navato: National Fallen Firefighters Foundation.
- Ryan, D. (2007) The Boston Gaelic Fire Brigade played a dirge. *The Boston Globe*. Boston, Retrieved July 12, 2010, from [http://www.boston.com/news/local/massachusetts/gallery/090507\\_firefighters\\_mourned?pg=12](http://www.boston.com/news/local/massachusetts/gallery/090507_firefighters_mourned?pg=12)
- Salka, J. (2005). *First in, last out: Leadership lessons from The New York Fire Department*. New York: Penguin Group.
- Sargent, C. (2006). *From buddy to boss: Effective fire service leadership*. Tulsa, OK: PennWell.

- Schein, E. H. (2004). *Organizational culture and leadership*. San Francisco, CA: Jossey-Bass Inc.
- Schein, E. (1990). Organizational culture. *American Psychologist*, 45(2), 109–119.
- Schwartz, S. (1999). A theory of cultural values and some implications for work. *Applied Psychology: An International Review*, 48(1), 23–47.
- Selznick, P. (1952). *The organizational weapon: A study of Bolshevnik strategy and tactics*. New York: McGraw-Hill.
- Seters, D. & Field, R. (1990). The evolution of leadership theory. *Journal of Organizational Change Management*, 3(3), 29–45.
- Shafir, E., Simonson, I., & Tversky, A. (1993). Reason-based choice. *Cognition*, 49(2), 11–36.
- Sharetv. (n.d. a) *Rescue me quotes*. Retrieved August 13, 2010, from [http://sharetv.org/shows/rescue\\_me/quotes](http://sharetv.org/shows/rescue_me/quotes)
- Sharetv. (n.d. b) *Rescue me quotes*. Retrieved August 13, 2010, from [http://sharetv.org/shows/rescue\\_me/quotes/pg-2](http://sharetv.org/shows/rescue_me/quotes/pg-2)
- Sharetv. (n.d. c) *Rescue me quotes*. Retrieved August 13, 2010, from [http://sharetv.org/shows/rescue\\_me/quotes/pg-4](http://sharetv.org/shows/rescue_me/quotes/pg-4)
- Shariat, S., Mallonee, S., & Stephens-Stidham, S. (1998). *Summary of Reportable Injuries In Oklahoma: Oklahoma City Bombing Injuries*. Oklahoma City: Oklahoma State Department of Health
- Sherif, M. (1966). *Group conflict and co-operation: Their social psychology*. London: Routledge and Kegan Paul.
- Sherif, M. (1954). Integrating fieldwork and laboratory in small group research. *American Sociological Review*, 19(6), 759–771.
- Sherif, M. (1936). *The psychology of social norms*. New York: Harper.
- Slovic, P. (2000). *The perception of risk*. London: Earthscan Publications.
- Smircich, L. (1983). Concepts of culture and organizational analysis. *Administrative Science Quarterly*, 28(3), 339–358.
- Smith, E. & Mackie, D. (2000). *Social psychology*. Philadelphia, PA: Psychology Press.

- Somerville, M. (2005). "Working" culture: Exploring notions of workplace culture and learning at work. *Pedagogy, Culture, and Society*, 13(1), 5–25.
- Sorensen, J. (2002). The strength of corporate culture and the reality of firm performance. *Administrative Science Quarterly*, 47(1), 70–91.
- Stein, A. (1976). Conflict and cohesion: A review of the literature. *The Journal of Conflict Resolution*, 20(1), 143–172.
- Stene, E. (1940). An approach to a science of administration. *American Political Science Review*, 34, 1124–1137.
- Stets, J. E., & Burke, P. J. (2000). Identity theory and social identity theory. *Social Psychology Quarterly*, 63(3), 224–237.
- Stogdill, R. (1948). Personal factors associated with leadership: A survey of literature. *Journal of Psychology*, 25, 35–71.
- Tajfel, H. (1978). *Differentiation between social groups: Studies in the social psychology of intergroup relations*. London: Academic Press.
- Tajfel, H. (1981). Social stereotypes and social groups. In J. G. Turner, *Intergroup Behavior* (pp. 144–167). Oxford: Blackwell.
- Tajfel, H. & Turner, J. (1979). An integrative theory of intergroup conflict. In W. Austin & S. Worchel, *The Social Psychology of Intergroup Relations* (pp. 33–47). Monterey, CA: Brooks/Cole Publishing Company.
- Tarley, J., Bowyer, M., & Merinar, T. (2009). *Fire fighter fatality Investigation # F2007–32*. Washington, DC: National Institute for Occupational Health and Safety.
- Taylor, D., & Moghaddam, F. (1994). *Theories of intergroup relations: International social psychological perspectives*. Westport, CT: Praeger Publishers.
- Teece, D. (1985). Applying concepts of economic analysis to strategic management. In J. Pennings, *Organizational strategy and change* (p. 60). San Francisco: Jossey Bass.
- Thompson, J. (1995). *The media and modernity: A social theory of the media*. Stanford, CA: Stanford University Press.
- Toft, B., & Reynolds, S. (1997). *Learning from disasters: A management approach*. Leicester: Perpetuity Press.
- Tracy, G. (2007). *Fallen Hero*. Retrieved February 14, 2012, from [www.gregorytracy.com/latest/](http://www.gregorytracy.com/latest/)

- Tresemmer, A. (2007, September 1). *Begin with a spark*. Retrieved September 25, 2009, from [http://firechief.com/leadership/management-administration/firefightering\\_begin\\_spark/](http://firechief.com/leadership/management-administration/firefightering_begin_spark/)
- TriData Corporation. (2002). *Firefighter fatality retrospective study*. Arlington, VA: TriData Corporation.
- U.S. Fire Administration. (n.d.). *Historical overview*. Retrieved January 21, 2010, from <http://www.usfa.dhs.gov/fireservice/fatalities/statistics/history.shtm>
- U.S. House of Representatives. (2006). *A failure of initiative: Final report of the Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina*. Washington, DC: U.S. Government Printing Office.
- United States Government Accountability Office. (2006). *Catastrophic disaster: Enhanced leadership, capabilities, and accountability controls will improve the effectiveness of the nation's preparedness, response, and recovery system*. Washington, DC: United States Government Accountability Office.
- Ursano, R., Fullerton, C., & McCaughey, B. (1994). Trauma and disaster. In R. Ursano, B. McCaughey, & C. Fullerton, *Individual and community responses to trauma and disaster: The structure of human chaos* (pp. 3–30). Cambridge: Cambridge University Press.
- Visiting DC. (n.d.). *Iwo Jima Memorial*. Retrieved July 13, 2010, from <http://www.visitingdc.com/images/iwo-jima-picture.jpg>.
- Waddick, P. (2002). Building risks? Informing the management of O.H & S in the construction industry. *E-Journal of the Workplace Education Research Consortium*, 1–18.
- Waite, M. (2008). *Fire service leadership: Theories and practices*. Sudbury, MA: Jones and Bartlett Publishers.
- Wallach, M. & Wing, C. (1968). Is risk a value? *Journal of Personality and Social Psychology*, 9, 101–106.
- Wehman, P., Goldstein, M., & Williams, J. (1977). Effects of different leadership styles on individual risk-taking in groups. *Human Relations*, 30, 249–259.
- Wicks, D. (2002). Institutional bases of identity construction and reproduction: The case of underground coal mining. *Gender, Work and Organization*, 9(3), 308–335.

- Wilkins, A. & Ouchi, W. (1983). Effective cultures: Exploring the relation between culture and organizational performance. *Administration Science Quarterly*, 28(3), 468–481.
- Willing, L. (2002, August 1). *Making difficult change*. Retrieved July 25, 2011, from <http://www.fireengineering.com/index/articles/display/154433/articles/fire-engineering/volume-155/issue-8/features/making-difficult-change.html>
- Wilmoth, J. (2005b, July 1). *Invest in the future*. Retrieved September 25, 2009, from [http://firechief.com/editorial/firefighting\\_invest\\_future-070105/index.html](http://firechief.com/editorial/firefighting_invest_future-070105/index.html)
- Wilmoth, J. (2004, April 1). *Preventing LODDs, Step Two*. Retrieved August 29, 2010, from [http://firechief.com/cp\\_editorials/preventing-lodds-step/index.html](http://firechief.com/cp_editorials/preventing-lodds-step/index.html)
- Wilmoth, J. (2007, June 1). *The brotherhood*. Retrieved August 27, 2010, from [http://firechief.com/editorial/firefighting\\_brotherhood/](http://firechief.com/editorial/firefighting_brotherhood/)
- Worthpoint (n.d.). Retrieved July 28, 2011, from <http://www.worthpoint.com/worthopedia/fire-patch-fdny-ladder-132-eye-of-the-storm>
- Youngblood, M. (1997). Leadership at the edge of CHAOS: From Control to Creativity. *Strategy & Leadership*, 25(5), 8–14.
- Yukl, G. (1989). *Leadership in organizations*. Englewood Cliffs, NJ: Prentice Hall.
- Zhang, H., Wiegmann, D., & von Thaden, T. (2002). *Safety culture: A concept in chaos? Human Factors and Ergonomics Society Annual Meeting Proceedings* (pp. 1404–1408). Baltimore, MD: Human Factors and Ergonomics Society.
- Zimbardo, P. (2008). *The Lucifer effect: Understanding how good people turn evil*. New York: Random House Trade Paperbacks.

THIS PAGE INTENTIONALLY LEFT BLANK

## INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center  
Ft. Belvoir, VA
2. Dudley Knox Library  
Naval Postgraduate School  
Monterey, CA
3. Gregory Dean, Fire Chief  
Seattle Fire Department  
Seattle, WA
4. A.D. Vickery, Assistant Chief  
Seattle Fire Department  
Seattle, WA
5. Tom Cox  
Monterey, CA
6. Gina Cox  
Bothell, WA