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The University of San Francisco

"SO THERE WE WERE..." THE STORIES TOLD BY CHIEF PETTY OFFICERS IN THE UNITED STATES NAVY, EXPLORED THROUGH A COMPLEXITY LENS

A Dissertation

Presented to

The Faculty of the School of Education

Department of Leadership Studies

Organization and Leadership Program

In Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

by Patricia Reily

San Francisco, California May, 2009

THE UNIVERSITY OF SAN FRANCISCO

Dissertation Abstract

"So there we were..." The Stories told by Chief Petty Officers in the United States Navy, Explored Through a Complexity Lens

Since the later part of the 20th century, there has been growing recognition that story telling might be of value as organizations grapple with challenges regarding how to communicate with people, both inside and outside of organizations, and manage change. While there is tacit recognition of the value of a skillfully told story in the Navy, a systematic study of story, or narrative, has never been done. It is the premise of this paper that there is a missed opportunity with respect to the study, and use, of story in organizations.

This was a qualitative study that applied both narrative theory and complexity science theory to an analysis of stories told by 34 Navy Chief Petty Officers. Two methods of data collection were used, semi-structured interviews and participant observations. Data were collected at two different locations, a leadership training academy and onboard a Navy ship at sea. One hundred and twenty nine stories, along with the discussions that accompanied them, were audio recorded and supplemented with observation memos. The data were analyzed by searching for reoccurring phrases, themes and patterns.

It was found that the participants, as individuals and as a group, functioned like complex adaptive entities, and that their narratives helped them to adapt to constantly

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changing environments. Seven primary themes—called dominant narratives in this study—emerged from the data. The dominant narratives, and their attendant schemas, indicated that a cycle of narrative meaning develops as people use stories to make sense of the past, cope with the present, and navigate into the future. This cycle of narrative meaning repeats itself as the present becomes the past, and the future becomes the present, with stories ebbing and flowing between sense making, defining reality and prescribing schemas for how to proceed into the future.

The conclusion of the study was that through increased awareness and understanding of narrative in organizations, leaders and managers in the Navy, and in other human organizations, could purposefully use story to enhance the adaptability of their organizations, in an ever-changing world. This study also found that complexity science theory was particularly well suited to explain the dynamic—almost living quality of story. While there is growing recognition that studying narrative provides deeper access to organizational realities, study of organizational narrative is underdeveloped and an area ripe for future research. This dissertation, written under the direction of the candidate's dissertation committee and approved by the members of the committee, has been presented to and accepted by the Faculty of the School of Education in partial fulfillment of the requirements for the degree of Doctor of Education. The content and research methodologies presented in this work represent the work of the candidate alone.

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DEDICATION

This paper is dedicated to

The deck plate leaders who make the Navy work:

The Chief Petty Officers

ACKNOWLEDGMENTS

Special thanks to the men who made this study possible: the directors of the Senior Enlisted Academy and the executive leadership of the ship (especially the Commanding Officer, the Executive Officer, the Public Affairs Officer and the Air Department Master Chief.)

Special thanks to the friends who encouraged me to pursue this program and patiently endured my unbounded enthusiasm for this topic, especially: my gal pals—the Booklettes and the Acorns, the Navy's Old Girls' Network, my aviator buddies who were always enthusiastically willing to share their knowledge, the foodies groups, my exercise partners and my fellow classmates.

The pursuit of this goal has been a personal epic journey. On that note, sincere thanks to my committee: Dr. Deborah Bloch, Dr. Patricia Mitchell and Dr. Richard Stackman for their patience, wisdom and for helping me grow immensely. Special thanks to my advisor, Dr. Debby P. Bloch, for her tenacity and patience.

Of course I would not have been able to complete the requirements for this degree, and write this paper, were it not for the love and sacrifice of my family. Special thanks to my children James and Aimei, I could not have done this if they were not the independent, responsible, intelligent, considerate, totally awesome young people they are.

Jim, the love of my life, words can only begin to express my thanks to you for bringing home the bacon while I pursued a dream. Thank you for your patience and love. Thank you for being my best friend and sounding board. Thank you for being my technical support. Life with you has been a romantic epic that continues to get better and better every day.

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Finally, special thanks to my mother, Norma Wappel, who passed away while I was in the process of collecting and analyzing data. I moved my home office into Mom's bedroom as I worked to complete this project and felt as if she was with me, every step of the way, helping me through the difficult times and cheering my accomplishments—just as she had done throughout my life. Thank you Mom for listening to me, believing in me and being my number one cheerleader.

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CHAPTER I

THE RESEARCH PROBLEM

A Sea Story: "Smith's Cranial"

The Arabian Sea...zero one hundred hours...no moon...less than ideal conditions for night flight operations. An aircraft carrier—90,000 tons of floating city—pitches and rolls in the inky blackness. A phalanx of jets returning from flight operations hit the 300 foot landing zone on deck every 30 to 45 seconds.

In the passageway directly below the flight deck Seaman Apprentice Harting (age 19) works with Chief Reiter (age 33) on an electrical panel. A dented flight deck cranial (helmet) with the name "Smith" neatly stenciled across the back, hangs by the ladder to the flight deck. The young seaman watches the cranial shudder each time a jet slams into the deck. The electrical panel repaired, the young sailor asks: "Hey Chief, who is Smith and why is his cranial hanging there?" The chief, chewing on a toothpick, glances over his shoulder at the cranial as he secures the electrical panel, and says, "Lemme tell you, and this is no shit...We had been in the Indian Ocean for ninety days and word was passed that a COD (aircraft with cargo) was inbound with mail and a load of ice cream. Smith was part of the supply crew. We had other incoming fixed wing so we had to get the COD unloaded and off the deck before the rest of the section came in. Young Smith, in a sweat to get his ice cream, or a letter from his girl friend, or whatever, almost went on deck without his cranial. The Master Chief caught him up short just about where you are standing and says, 'Hey Smith, where do you think you are going without your cranial? I don't want to be writing a letter to your mother after your brains—what little you have—are spilled all over the deck. I got enough paper work to do.' So Smith double times it back to get his cranial. And lucky he did, in the sweat to get the COD unloaded Smith took a glancing prop strike to the head. If he didn't have his cranial on his brains would have been spilled all over the deck and some young sailor—just like you shipmate—would have had to clean them up. So the Master Chief convinced the skipper that we should hang Smith's cranial up there as a reminder."

Six months later Seaman Harting was painting the bulkhead in the same passageway with Seaman Apprentice Schiff (age 18), who reported on board last week. Seaman Apprentice Schiff said to Seaman Harting, "Who the (expletive) is Smith and what is his cranial doing there?" Seaman Harting replied, "Lemme tell ya, and this is no shit...last deployment Smith was assigned to a crew that was unloading a COD loaded with ice cream. They were in a sweat to get the COD unloaded because they had fixed wing coming in and they needed to get the COD off the deck. Smith took a strike to the head. The first one nicked him but the second one took his head right off." Seaman Apprentice Schiff said, "No shit, were you there?" Seaman Harting replied, "Naah, but a buddy of mine was. He had to clean up the brains and shit that were spilled all over the deck." Seaman Apprentice Schiff said, "No shit?" Seaman Harting, "No shit, and they ended up giving the dude a medal." Seaman Schiff, "Did they get the (expletive) ice cream unloaded?" Seaman Harting snorted, "I guess so. That's probably why they gave the dude a medal." Seaman Schiff chortled, "They should have given him a (expletive) purple heart!"

The sea story: "Smith's Cranial," was told to the researcher about an incident that occurred in 1990. It is one of the stories that inspired this research.

Statement of the Problem

"So there we were..." or the saltier introduction, "And this is no shit..." are the phrases often used in the sea services to launch into a narrative that is known to every mariner from seaman to admiral as a "sea story." Sea stories are ubiquitous in the Navy they are ubiquitous in all human social systems (Bruner, 1990; Polkinghorne, 1988). Yet, while there is tacit recognition of the value of sea stories and informal respect for good storytellers, there is little overt attention given to the role that sea stories, story, or narrative in general, might play in the Navy today.

Since the later part of the 20th century, there has been growing recognition that story telling might be of value as organizations grapple with challenges regarding how to communicate with employees and customers, motivate employees, indoctrinate newcomers and manage change (Boyce, 1996; Fleming, 2001; Gabriel, 1991; Mitroff & Kilmann, 1975; Morgan & Dennehy, 1997). Yet people continue to apologize for their use of story in business organizations with phrases like "it is only a story" (Cox, 2004), and little systematic research has been done on story telling in organizations (Gabriel, 2000, 2004).

It is the premise of this paper that perhaps rather than a problem, there is a missed opportunity with respect to the study, and use, of story in organizations, "Stories open valuable windows into the emotional, political, and symbolic lives of organizations...we gain access to deeper organizational realities through stories...stories enable us to study organizational politics, culture and change in uniquely illuminating ways" (Gabriel, 2000, p. 2).

Polkinghorne (1988) addressed the problems that researchers face with respect to studying human beings and human organizations, and suggested that narrative research was woefully underdeveloped as a window into the full complexity of human experiences.

One of the difficulties in discussing research from a human science perspective is that many of the concepts related to epistemology have been given technical meanings by the logical positivist revisions of formal science. Concepts such as "cause," "validity," "justification," and "explanations," were redefined as part of the effort to limit knowledge to whatever could pass the test of certainty... human science can no longer only seek mathematical and logical certainty. Instead, it should also aim at producing results that are believable and verisimilar. (p. 161)

Prusak (Brown, Denning, Groh, & Prushak, 2005) supported Polkinghorne's (1988) argument with respect to the value of studying story in organizations. What's taught in business schools, what's taught in training and development classes, and in most corporations, has very little to do with how organizations really work. It's worse than Plato's cave—there aren't even shadows. It's a question of using an incorrect metaphor—the metaphor of the machine. Among the many ways this metaphor fails, is its failure to explain how people learn to act in organizations. Where is the knowledge in organizations? How do you know what people know? How do you know how to behave? How do you know how to act when you enter an organization? Many of the answers to questions can be

understood through stories. (Brown et al., p. 3)

NASA—a large government bureaucracy with challenges similar to the Navy has been publically cited as an organization that has, at times, disregarded the importance of organizational culture and narrative, resulting in the perpetuation of flawed decision making that contributed to both the Challenger and Columbia space shuttle accidents. The Columbia Accident Investigation Board reported that the organization was not responsive to criticism following the Challenger accident due to an ingrained bureaucratic culture that became rigidly defensive when faced with criticism. The organization was reluctant to accept any cause that could not be validated through strictly positivist measures (Columbia Accident Investigation Board, 2004).

Narrative is the primary way that cultural norms are communicated and instilled in human beings. A holistic narrative that brings together seemingly isolated events into a coherent sequence can help an organization make retrospective sense of seemingly disconnected pieces of data. A holistic narrative can then be used to illuminate causes in view of all the data and thus facilitate organizational change to perhaps reduce the repetition of similar mistakes in the future (Polkinghorne, 1988).

It is the narrative explanation, as opposed to an explanation by law, or correlation, that makes narrative research different from the research ordinarily undertaken in the human sciences. For example the explanations of why the Challenger exploded can be given in terms of the physical properties of the o-rings that malfunctioned during the launch...however, they do not in themselves answer the question of why in this particular instance the space shuttle exploded. A satisfactory answer to this question requires a narrative explanation. Narrative explanations are retrospective. They sort out the multitude of events and decisions that are connected to the launch and they select those which are significant in light of the fatal conclusion. They draw together the various episodes and actions into a story that leads through a sequence of events to an ending. The report is retrodictive rather than predictive. It is a retrospective gathering of events into an account that makes the ending reasonable and believable. It is more than a mere chronicling or listing of the events along a time line. It configures the events in such a way that their parts in the whole story become clear. (Polkinghorne, 1988, p. 171)

This paper did not intend to suggest that analyzing story in organizations will result in the revelation of the panacea for all organization ills, or that the study of organizational story could in some way replace the need for other types of analysis. This study merely attempted to study the stories of one group of people in one organization to uncover what, if any, insights they might reveal, and how narrative analysis might work with other types of analysis to create a more meaningful and relevant picture of how this group of people and their organization functions. The most this study could aspire to was to raise the awareness level of how story is currently functioning for the group studied, and perhaps suggest that heightened awareness might serve to enhance the group's, and the organization's, ability to successfully grapple with future challenges.

Story Defined

Before launching into a discussion of the role of stories, it is important to define the term "story" for the purposes of this paper. "In creating a story, the teller chooses and orders events for inclusion or exclusion, putting them in sequence, and indicating cause and effect relationships. Such stories can be fictional or constructed from life as we experience it" (Baskin, 2008, p. 3). Stories give meaning and structure to life events. They tap into increasingly deeper layers of meaning in human existence (Geertz, 1973b).

Purpose of the Study

Sea stories are an accepted means of communication in the Navy; yet a review of the literature revealed that sea stories have never been systematically studied. Studies of the use of narrative in other organizations found that stories function in a wide variety of contexts, such as: training and education, socializing newcomers, making sense out of confusion, and facilitating change—to name just a few of the contexts and functions of narrative.

The purpose of this study was to explore what narrative—in the form of stories reveals about the people who tell the stories and the organizations in which they work. More specifically this study looked at how the participants in the research use story to: (a) make sense of the past, (b) cope with the present, and (c) navigate into the future.

As the story "Smith's Cranial" illustrated, story functions in a non-linear fashion within organizations. Therefore, this study explored not only the possible meanings of the stories collected, but how and why stories function the way they do; this was done by looking at the stories through a complexity science lens. This was a qualitative study designed to collect and analyze sea stories utilizing primarily two methods: (a) semi-structured group and individual interviews designed to evoke stories and explore their meaning; and (b) participant observations in training and operational environments to observe and document the occurrence of stories. Stories and the dialogue surrounding them—were collected, analyzed and interpreted to provide a deeper, richer understanding of the meaning, nature and function of stories in the lives of the individuals who tell them and hear them in an organizational context.

Background and Need for the Study

There has been little systematic research done on the role of narrative in organizational settings, and an extensive search revealed that there has been no systematic research done on the role stories play in the sea services. There have been some studies—discussed in Chapter II—that have explored the use of story and narrative in training, education and leadership, both inside and outside of the military, and how people use story to resolve dissonance, make sense, persuade, communicate and lead. Few studies addressed how they explored, with the individuals who tell the stories, how stories can help they better understand themselves, others and the environments in which they work and live (Adamson, Pine, Van Steenhoven, & Kroupa, 2006; Hansen, 1993; Mitroff & Kilmann, 1975; Schein, 2006; Schein & Bennis, 1965; Shaw, Brown, & Bromiley, 1998). Fewer still have explored, or explained how they explored, how story might be used to proactively and consciously to make sense, cope and successfully proceed into the future (Adamson, et al., 2006; Shaw, et al., 1998).

In a study of organizations that perform inherently dangerous and highly technical tasks under seemingly chaotic conditions, it was found that flight operations on board

Navy aircraft carriers were "the most extreme in the least stable environment" (Rochlin, La Porte, & Roberts, 1987). Yet, from a safety perspective, aircraft carrier crews performed very well, better than their cohorts in other similar high risk professions, despite the fact that the crews are largely young and inexperienced, and the management team turns over every 18 to 24 months (Rochlin, et al., 1987). Rochlin et al. (1987) suggested that story was one of the primary ways knowledge was transmitted on board these ships and inferred that story played a significant role in the excellent safety record. This tangential piece of a research finding suggested that stories may play a significant communication role in the Navy—a role that has never been systematically, or purposefully, studied.

The lack of systematic study of sea stories is not meant to suggest that members of the sea services do not respect the art of storytelling or the value of stories as a teaching aid. On the contrary, the ability to tell a good story has always been a highly regarded skill in the Navy. The lessons of "Grampaw Pettibone"—a fictional naval aviator who tells stories about aviation mishaps, or near mishaps—are standard fare in aviation safety publications; and case studies in story form are often used in leadership training. While sea stories are appreciated as a natural, easy, entertaining and energizing way to communicate, there has been little attention given to using story to illuminate the causes of problems or bridge the gap between technical knowledge and how that knowledge fits holistically into how the organization and its members' function.

Most advocates of the increased use of storytelling in organizations (Barry & Elmes, 1997; Denning, 2001; Hattersley, 1997; Prusak, Denning, Groh, & Brown, 2005) have taken great care to emphasize that story telling cannot replace other forms of

analytical thinking, but they have suggested that storytelling, along with the dialogue that often accompanies it, can supplement quantitative data by enabling the narrator, and the listener, to envision how that knowledge fits into a complex, organic whole that is constantly shifting and changing. Practitioners and researchers who have sought to employ and analyze narrative in organizations have suggested that stories can increase understanding and bring people together in a common perspective, and thus strengthen organizational culture as well as help organizations, and the people who comprise them, adapt to change (Adamson, et al., 2006; Boyce, 1995, 1996; Czarniawska, 1997, 1998; Gabriel, 2000, 2004; Hansen, 1993; Mahler, 1988; McKenna, 1999; Mitroff & Kilmann, 1975; Wilkins, 1979, 1984).

In short, stories can give life meaning; and help people make sense of, as well as cope with, their world.

In creating a meaningful universe people resort to stories...the more people are buried in a mind numbing avalanche of information the greater the importance of stories...stories make experience meaningful, stories connect us with one another, stories make characters come alive, stories provide an opportunity for a renewed sense of organizational community. (Gabriel, 2000, p. 18)

It follows that stories do play an important role in organizations. It is the purpose of this paper to examine that role.

Theoretical Foundations

Overview

The overarching theoretical framework used to inform this study was narrative analysis using a story paradigm. The foundational questions of narrative analysis are: "What does this narrative reveal about the person and the world from which it came? How can this narrative be interpreted so that it provides an understanding of, and illuminates the life and culture, that created it?" (Patton, 2002, p. 115).

Patton (2002) explained that the hermeneutical perspective, with its emphasis on the interpretation of text, largely informs narrative studies as does interpretivist social science and literary criticism; but narrative theory and analysis extends the idea of text to include in-depth interview transcripts, and transcripts of oral performances of stories, as well as written text. Patton (2002) explained that narrative studies are also influenced by the phenomenologists' emphasis on perceptions and understanding of lived experiences. Personal narratives reveal cultural and social patterns through the lens of individual experiences. The central idea of narrative analysis is that narratives offer an especially translucent window into cultural and social meaning (Patton, 2002).

The ancient Greek literati were the first to recognize a narrative theory of sorts through their identification of themes in myths and legends. Much of the early foundational work in narrative analysis followed the pattern established by the ancient Greeks by identifying common themes, threads, elements and concerns in stories, myths and legends, as well as exploring their meanings and functions (Georges, 1969). It can be logically inferred that the behavior of the ancient Greeks was influenced by their commonly held myths and legends. But it was not until the 20th century that researchers and theorists coming from widely diverse backgrounds picked up where the ancient Greeks left off and started to develop—in earnest—narrative theories to guide their work (Georges, 1969). Campbell (1988) found common themes in the myths of diverse cultures. In his analysis of folk tales from a variety of cultures Bettelheim (1970) found common themes and morals. Jung (1964) theorized that common themes in popular myths reflect the constantly repeated experiences of humanity. Ricoeur (1984) legitimized the function of "story as text" as a way of interpreting deep philosophical meaning in humans and their institutions.

In the later part of the 20th century and early part of the 21st century narrative theory using a story paradigm came to be appreciated by researchers who were specifically interested in the nature of organizations (Baskin, 2008; Boje, 1991, 1995, 1998, 2001; Boje, Fedor, & Rowland, 1982; Czarniawska, 1997, 1998; Dandridge, Mitroff, & Joyce, 1980; Gabriel, 1991, 2000, 2004; Georges, 1969; Mitroff & Kilmann, 1975). An early, landmark study by Mitroff and Kilmann (1975)—"action researchers" working within an organization—explored the role of story in organizations and proposed that stories could be used to tackle organizational challenges and move organizations in a desired direction.

But fundamentally the organization research utilizing narrative theory has been built on a larger foundation of work on narrative—especially in the areas of myth and legend—conducted by folklorists, anthropologists, sociologists, psychologists and linguists, who have proposed that story may be a way of uncovering insight into people and how they function in a socially complex, sometimes chaotic, world (Barthes, 1972; Boyce, 1996; Campbell, 1973; Geertz, 1973a; Jung, 1964; Labov & Waletzky, 1967; Mahler, 1988; Mead, 1934; Ricoeur, 1984; Van Dijk, 1975).

While this study was informed by narrative theory in general, it also explored how and why stories function the way they do within organizations. Since stories, such as the story of *Smith's Cranial*, function in a non-linear fashion within organizations, complexity science theory was used to explore, and perhaps explain, how and why stories work the way they do.

Proper Narrative Theory

Gabriel (2000) provided students, or others embarking upon narrative analysis for the first time, with a template on how to proceed. Gabriel (2000) focused on analysis of "proper narrative"—that is story with a beginning, middle and end, held together by a plot—because he saw the simplicity of this focus as one way to "rescue meaning from the personal experience of individuals in organizations in an epoch saturated by information in which meaning is constantly displaced and crowded by noise" (Gabriel, 2000, p. 22). Throughout Gabriel's (2000) work there was an understanding that stories should be treated as "lore." That is to say, stories are not necessarily accurate accounts of past events; rather they are reconstructions of the organization's history from one person's perspective.

A consistent theme in Gabriel's (2000) analysis was that stories act as fantasies, fulfilling powerful wishes and desires of the individuals in the organizations. He said that the analysis of organizational stories and myths could provide vital information about organizations, organization members, members' outlooks and members' feelings that are not accessible in other ways. Gabriel (1991, 2000, 2004) said that people may be able to articulate their experiences in and around organizations in deeper and more accurate ways through stories, jokes and other symbols rather than "through straight talk...symbolism permits the expression of meaning by surrounding it in a smokescreen of poetic license which enables it to evade various social and mental censors" (Gabriel, 1991, p. 871).

Gabriel (1991) said that methods for decoding and analyzing stories are quite under-developed, and he attempted to lay out a systematic approach for the interpretation of stories in a variety of organizations. Gabriel (2000, 2004) proposed a classification system to aid in the systematic analysis of stories. Gabriel (2000, 2004) explained that it is the researcher's job to unravel deeper meaning through the classification process. The stories Gabriel (2000, 2004) described in his findings expressed collective fantasies, imparted meaning, and reflected values. Gabriel (2000, 2004) said that stories, along with gossip and jokes, represented attempts to humanize the impersonal aspects of organizations.

Drawing upon the classifications devised by the ancient Greeks and popularized by bards (notably Shakespeare), literary critics and folklorists, Gabriel (2000, 2004) proposed a typology of organizational stories that is helpful for the analysis of organizational stories. In his analysis of 404 stories collected from a variety of organizational settings, Gabriel (2000) used an iterative process to classify stories into four "generic poetic modes: (a) comic, (b) tragic, (c) epic, or (c) romantic" (p. 84). He then analyzed the stories classified into one of the four modes by examining tropes, characters and plots. Gabriel (2000) also proposed "secondary poetic modes" (p. 84) that can result in hybrid stories or variations on the generic modes such as "tragi-comic" or "epic-comic" (p. 84). He explained that once the mode and characteristics have been identified in a story, comparisons could be made across organizations examining the prevalence of particular types of stories and their significance. Comparisons can also be made between variants of the same story establishing important similarities and differences in a systematic way (Gabriel, 2000).

While he proposed a classification system of sorts, Gabriel (2000) also used a hermeneutic approach in his interpretation of the stories he encountered in a variety of organizations. Gabriel selected stories to use as examples of the points he was trying to make. He did not claim that the examples he selected were representative of all types of organizational stories and myths, yet he did make some tentative generalizations about the role stories and myths play in organizations. Gabriel described many of the stories and myths he studied as collective fantasies, fulfilling shared desires that offered either opportunities for cathartic exchange or a partial inoculation against misfortune. He found that the organizational myths he studied often expressed ambivalent and contradictory wishes and permitted different or competing interpretations. Gabriel found that stories often concealed as much as they revealed; for example pride sometimes concealed hurt, defiance sometimes concealed weakness, and mirth at times concealed anxiety. He found that myths were often a symbolic means of turning possibility into activity and powerlessness into control. He found that myths often offered consolation against pain and suffering. Through his interpretations, he explored the feelings generated by stories and some of the meanings that they revealed (Gabriel, 1991, 2000, 2004).

Gabriel found that some of the narratives he collected were "proto-stories"—that is to say, they contained the seed of a story without actually achieving the "poetic imagination and narrative complexity" that would have made them "proper stories" (Gabriel, 2000, p. 42); or they were reports—that is to say, descriptive accounts of events emphasizing factual accuracy rather than narrative effect. But through repeated examination, most of the stories he collected began to find places in the classification system described above (Gabriel, 1991, 2000, 2004).

In summary, Gabriel (1991, 2000, 2004) said that researchers studying organizations should take stories seriously, but they should not be treated as accurate, or generalizable, accounts of real events. Rather, he suggested that stories should be viewed as reconstructions of events that fulfill vital unconscious desires. And while Gabriel did not overtly cite elements of complexity theory in his analysis of story he did acknowledge the non-linearity of stories, and tacitly alluded to complexity theory principles, such as sensitive dependence—that is to say, small factors may produce large effects— when he suggested that aspects of narrative that may seem trifling or insignificant may be a clue to deeper meaning that is inaccessible by other means. He also addressed story's role in the creation of culture and a shared view of reality that are reflective of the ontological aspects of complexity theory (Gabriel, 1991, 2000, 2004).

Table 1—primary and secondary poetic modes—summarizes Gabriel's (2000) typology of organizational stories.

Characteristic Mode	Characters (Protagonist and others)	Plots and Predicaments	Tropes	Emotions
Comic	Deserving victim, fool, trickster	Misfortune, mistake, accident, coincidence, surprise	Deserved chastisement, pomposity, arrogance, vanity	Mirth, scorn, aggression, hate
Tragic	Non-deserving victim/s, villain/s	Undeserved misfortune, trauma, crime, injury, insult, misrecognition	Malevolent fate, blame, noble or decent victim, evil or devious villain	Sorry, pity, fear, anger, pathos
Epic	Hero, rescue object, assistant, villain	Contest, test, challenge, trial, quest, achievement, sacrifice	Nobility, courage, loyalty, honor, altruism, ambition	Pride, admiration, nostalgia, envy
Romantic	Love object, lovers, gift giver, injured or sick character	Love triumphant, falling in love, love fantasy, recognition	Worthiness of love, caring, empathy, or kindness,	Love, gratitude, admiration, nostalgia,
Humor	Survivor, wizard, ironist, villain	Misfortune as occasion for wit, mishap, reversal of fortune, injustice, coincidence	Denial of emotion, grace, sense of humor, self-possession, fortitude	Mirth, admiration, pity
Cock-up	Hero, hero fixer, wizard	Test for non-heroic hero, crisis, puzzle, problem, mistake, breakdown	Display of wit, imagination, cunning, common sense, credit	Mirth, admiration
Tragi-comic	Victim as un- heroic hero and vice versa	Misfortune both deserved and undeserved, comic twists and/or tragic results	Fortitude, moral courage, defiance, wit	Amusement, pity, fear, guilt, pathos
Epic-comic	Unwitting hero, trickster, villain, victim, accomplice	Unorthodox achievement, display of wit, prank, puzzle, challenge, wager, surprise	Sense of humor, irony, imagination, bravado	Mirth, admiration, levity

Table 1 Primary and Secondary Poetic Modes

Story in Organizations Through a Complexity Lens

A number of researchers have used a complexity theory framework to analyze human interactions and human social systems (Baskin, 1998; Bloch, Henderson, & Stackman, 2007; Boje, 1991; Chia, 1998; Stacey, 1996, 2000; Wheatley, 2006). A complexity view has challenged the mechanistic model that has been used to largely explain how work gets done in organizations (Goerner, 1999). Simply put, the mechanistic model—sometimes also described as "reductionist" or "linear"—fails to adequately explain how human social systems, such as organizations, work (Bloch, et al., 2007; Goerner, 1999). Following the logic developed by authors who have applied complexity science principles to their research, this study applied complexity theory to a study of story in organizations in an attempt to better understand how and why stories work the way they do within organizations.

Complexity theory explains that the world is made up of complex adaptive systems, or entities, that have the ability to maintain themselves—a process that is sometimes referred to as autopoesis (Maturana & Varela, 1987). Viewed through a complexity thinking paradigm, organizations, and the people who work in them, function like complex adaptive entities (Baskin, 2008; Bloch, 2005; D. P. Bloch, et al., 2007; Boje, 2001; Chia, 1998; Gleick, 1987; Kauffman, 1995; Lewin, 1992; Lewin & Regine, 2001; Stacey, 1996, 2000; Wheatley, 2006). The current study explored how stories function within complex adaptive entities.

There are two authors—Baskin and Boje—who overtly focused on a combination of narrative theory and complexity theory in their study of organizations—an approach that was adopted in this study. Both Boje (2001) and Baskin (2008) underscored the point that narrative in organizations functions in a non-linear fashion, adapting, sometimes changing and morphing to adjust to ever changing environments and conditions. They both found people in organizations use narrative to create meaning and a shared view of reality (Baskin, 2008; Boje, 1991, 1995, 1998, 2001).

Antenarrative Theory

Boje (2001), like Gabriel (2000), viewed organizational storytelling as the institutional memory system of an organization. But Boje (2001) asked, "Just how abbreviated can a story be and still be classified as a story?" (p. 110). Boje (2001) gave the extreme answer that the exclamation "You know the story!" actually constitutes a story (1991, p. 110).

So while many researchers, such as Gabriel (2000), chose to frame their analysis with what is sometimes called "proper narrative theory," that is to say they focused on stories with: (a) an original state of affairs, (b) an action or an event and, (c) the consequent state of affairs held together by a plot or a predicament, Boje (2001) stretched proper narrative analysis with "antenarrative analysis" (p. 2). He suggested that researchers seeking to uncover the deeper meanings in organizations should not restrict themselves to proper stories with plot and proper sequence. He said that antenarrative— the fragmented, nonlinear, incoherent, collective, unplotted, pre-narrative to proper narrative as "an improper story telling, a wager that a proper narrative can be constituted" (Boje, 2001, p. 2). Antenarratives can be thought of as stories in the making. Antenarratives take place as people dialogue and co-create stories in an attempt to make sense or find a common interpretation of events and their meaning.

In antenarrative theory, Boje (2001) focused on the analysis of stories that are too unconstructed to be analyzed with traditional approaches, "There are occasionally coherent plots in antenarrative but elsewhere only jagged edges and bottomless pits of chaos to tiptoe around" (p. 5). Boje said that people's lives, and therefore their narratives, are not linear. He explained that "people are always in the middle of living and tracing their storied lives" (p. 6); therefore forcing narrative into a formal narrative framework with a plot is not always useful (Boje, 2001).

Boje (2001) summarized his views of narrative theory and antenarrative theory by describing narratives as not just sense making or sense giving but as ontologizing forces within organizations. That is to say, narratives are not static; they are dynamic, adapting and emerging, building and dissipating, resulting in small as well as large effects that can foster, or limit, an organization's—or individual's—growth or demise. Boje drew upon concepts from chaos and complexity theory to describe the dynamic, non-linear properties of stories to explain how they function. In his explanation of antenarrative theory he was critical of the mechanistic metaphors and reductionist approaches that are often used in narrative analysis. Boje's antenarrative theory described an organic way of looking at stories and their effect upon people in organizations (Boje, 1991, 1995, 1998, 2001; Boje, et al., 1982).

Storied Spaces as Complex Adaptive Systems

Baskin (2008) suggested that principles of complexity theory can be applied to narrative analysis to explain how stories help people make sense, cope and discover actions that they must take in order to survive. Baskin suggested that the idea of "storied spaces... a space defined by the stories we have accepted to explain events that have happened and continue to happen" (p. 1), could be substituted for the complexity principle of complex adaptive systems. Baskin said,

One can think of human social life as an intricate nested network of spaces—family and work group, organization and community, profession and nation—in which membership depends on the acceptance of negotiated stories by which each grouping defines the nature of the world and how people in the group must respond to prosper. (Baskin, 2008, p. 1)

Baskin (2008) incorporated Boje's (2001) ideas about antenarrative into his theory of storied spaces by suggesting that people use antenarrative—the dialogue surrounding an incomplete story, or a story in the making—as they attempt to cope with emerging phenomenon. Baskin (2008) suggested that the ability to tell stories has been mankind's key survival strategy—a unique ability that separates humans from all other animals. He suggested that story is the way humans organize their thoughts, and that, as individuals, humans have unconsciously formed their stories even before they voice them. He suggested that people voice their stories and share them with others as they negotiate a personal and collective view of reality. Through the interplay of narrative and antenarrative humans negotiate meaning with others. What emerges are dominant narratives that reflect a collective view of reality that comes to be accepted as truth (Baskin, 2008).

Dominant narratives are then used to assess new information; that is to say, they give the individual, as well as the group, a way to respond to the environment. Some dominant narratives appear to be particularly helpful, or resilient, so they prevail for long periods of time with little change; but others disappear forever, or change, sometimes reemerging at a later date, or they are replaced by totally new emerging narratives (Baskin, 2008). Baskin (2008) explained that the interplay between narrative and antenarrative could illuminate meaning in the storied lives that humans live. Like Gabriel (2000) and Boje (2001), Baskin found evidence of dominant narratives within organizations that functioned like self-reinforcing feedback loops. He identified phase transitions that enabled organizations to experiment with a variety of outcomes and thus thrive—or conversely decline. He explained that "storying" could allow for the trial and error that is so necessary in the creative and successful adaptation of an entity to its internal and external environments (Baskin, 2008).

Summary of Theoretical Rationale

The theories of Gabriel (2000), Boje (2001) and Baskin (2008) indicated that a cycle of narrative meaning develops as people use stories to make sense of the past, cope with the present, and proceed into the future. This cycle of narrative meaning repeats itself as the present becomes the past, and the future becomes the present, with stories ebbing and flowing between sense making, defining reality, and providing maps for how to proceed into the future. Stories such as *Smith's Cranial* travel in a non-linear fashion through organizations, facilitating connections between people and creating meaning. Stories bridge the gap between abstract and technical knowledge and how that knowledge fits into a complex whole that is constantly shifting and changing as the organization moves through space and time.

Narrative theory combined with complexity theory offered a framework for a study of how and why stories work for people in organizations. This study explored the ontological properties of stories in an attempt to uncover how the participants used stories to make sense of the past, cope with the present, and navigate into the future in an everchanging environment.

Bruner (1990), like Polkinghore (1988), noted that we know precious little about how narrative processes work, and that this meager knowledge stands in contrast to the extensive knowledge we have of how the paradigmatic processes used in formal science and logical reasoning work. He (Bruner, 1990) added that the best way to learn is through comparative methods. The stories—and antenarratives—collected for this study were analyzed using comparative methods. It was hoped that using comparative methods, and a multi-lens approach, would result in a more comprehensive understanding of the role that stories play in the Navy.

Research Questions

This qualitative study explored what narrative—in the form of stories—revealed about a group of people within the United States Navy. Studies of the use of narrative in other organizations found that stories functioned in a wide variety of contexts, such as: training and education, socializing newcomers or novices, persuading and leading, resolving dissonance and facilitating change—to name just a few of the contexts and functions of narrative. The theories of Baskin (2008), Boje (2001), Gabriel (2000), Patton (2002) and Weick (1995), among others, have suggested that people in organizations used stories to make sense, give sense, cope, and prescribe ways to behave in the future. The theories of Baskin (2008) and Boje (2001) have suggested that complexity science theory helps to explain how and why stories function the way they do for people in organizations. Therefore, the key, overarching research questions in this study were:

1. How was story being used by the participants in this study to make sense of the

past?

2. How was story being used by the participants in this study to cope in the present?

3. How was story being used by the participants in this study to navigate into the future?

4. How can principles of complexity theory help to explain how stories are functioning within this organization?

Definition of Terms

Following is a list of terms referred to in this study. The list is organized into two parts: a list of general and narrative terms followed by a list of complexity terms. In addition a glossary of Navy terms is included as Appendix A.

General Terms and Narrative Terms

Antenarrative: A fragmented, non-linear, unplotted narrative, that may or may not hint at a proper narrative (Boje, 2001).

Culture: For the purposes of this study "culture" will be defined as:

(a) a pattern of basic assumptions, (b) invented, discovered or developed

by a given group, (c) as it learns to cope with its problems of external

adaptation and internal integration, (d) that has worked well enough to be

considered valid, and therefore (e) is to be taught to new members as (f)

the correct way to perceive think and feel in relation to those problems.

(Schein, 1983, p. 111)

Folk tale: A story that takes on a mythical quality for a particular culture or group of people.

Dominant narrative: "Fixed accounts of past events, the historically grounded, control oriented retellings, whose function in storied spaces is to keep our behavior congruent with ways that have always worked" (Baskin, 2008, p. 5).

Grande narrative: A story told repeatedly and often purposely from one perspective, a story that often originates and is perpetuated by the controlling elements of an organization. Grand narratives can achieve the level of myth. Many myths are grand narratives.

Lore: Articulated reconstructions of history from one perspective that persist over time, not necessarily an accurate account of a past event.

Microstoria: Stories that may be fragmented and that may, or may not, be repeated frequently, and which usually contradict a grand narrative.

Narrative: Any and all pieces of articulated language used to sustain or negotiate meaning.

Proper narrative, or proper story: A narrative or story with a beginning, middle and end, held together by a plot, usually told from the perspective of one person or a group of people.

Plot: Usually a problem or a predicament in a story that holds the parts of a story together often by creating logical connections.

Report or Chronicle: Articulated language intended to be a strictly factual account of something that actually happened, usually with an orderly sequence.

Sea Services: For the purposes of this paper, Sea Services was used to refer to the United States Navy and United States Coast Guard.

Sea story: A term used by members of the sea services to describe a story with a beginning, middle and an end, usually illustrating some point. A sea story is usually meant to be instructive or entertaining, and while plausible is not intended to be strictly factual.

Sense making: The process that people go through as they attempt to cope with the dissonance that arises in their function in organizations.

Sequencing: The order of events that links a story to the dialogue that preceded it or the order of events within the story itself that enhances its sense making properties.

Story: A narrative with a beginning, middle and end, usually illustrating some point. A story is meant to instruct or entertain, and while plausible is not intended to be strictly factual.

Touchstone story: A story that seems to reflect the essence of the organization—a story that that seems to coalesce individuals around a certain theme.

Tropes: Poetic license or embellishments in stories used to make sense of the story or draw connections. For example "love" could be considered a trope in the tragic story of Romeo and Juliet.

Complexity Terms

Attractors: Attractors are factors or forces that can function to prevent or limit the growth of a complex adaptive system; or they can serve to foster growth, thereby enabling an entity to reach higher peaks of survivability. *Limiting attractors* prevent, or limit, growth and emergence, while *strange attractors* enhance growth and foster the emergence of an entity (Bloch, et al., 2007; Gleick, 1987; Goerner, 1999; Stacey, 1996).

Autopoesis: A process through which complex adaptive entities or entities self organize, adapting internally to changing external environments (Bloch, et al., 2007; Maturana & Varela, 1987).

Complex adaptive systems or complex adaptive entities: Self-organizing systems that are open to an ongoing flow and interchange of energy. They are characterized by autopoesis (Bloch, et al., 2007; Gell-Mann, 1994; Kauffman, 1995; Stacey, 1996; Waldrop, 1992).

Fitness peaks: During phase transitions complex adaptive entities seek adaptations to the landscape of their changing or new environment by searching for the places with the highest adaptability, or fitness with their environment; hence the term fitness peaks (Kauffman, 1995).

Fractals: Complex adaptive entities exhibit "fractality." They can be seen in the structures within them and they themselves echo larger structures (Bloch, et al., 2007; Mandlebrot, 1982).

Networks: Webbed connections both inside and outside a complex adaptive system. They are closely knit and ever widening (Barabasi, 2002; Bloch, et al., 2007).

Nonlinear dynamics: In nonlinear dynamics cause and effect are not equal; that is to say there is no simple linear regression. For example during a phase transition, the transitions between order and chaos draw on multiple causes from multiple network relationships. There is continuing interplay between internal and external factors in nonlinear dynamics (Bloch, et al., 2007, p. 200).

Phase transitions: The dynamic processes between order and chaos that provide the opportunity for organizational creativity and emergence (Barabasi, 2002; Baskin, 2008; Bloch, et al., 2007; Kauffman, 1995; Stacey, 1996).

Sensitive dependence: Because the dynamics are nonlinear, small changes may bring about large effects (Bloch, et al., 2007, p. 200).

Spirituality: "CAEs exhibit interconnectedness and interdependence. Interdependence is a characteristic of all living systems. Spirituality is the experience of this unity" (Bloch, et al., 2007, p. 200).

Limitations of the Study

The biases and filters of the researcher were the major limitations of this study. Dandridge, Mitroff and Joyce (1980) cautioned that students of organization studies must take care to be aware of their own myths when they embark upon the analysis of the myths and stories in organizations. Gabriel (2000) cautioned that there is a risk that stories will be selectively used to amplify or reinforce the preconceived ideas or assumptions of the researcher. A large amount of raw data was collected and processed by one person in the development of the findings and conclusions of the current study. Therefore, the risk of presenting a mono-perspective was high and perhaps unavoidable. That being said, approaching the data from multiple theoretical and data collection perspectives helped to compensate for the researcher's filters. And it is hoped that addressing the researcher's background, possible biases and limitations up front helped the readers of this study put the data in perspective.

It might appear that the researcher was trying to force the data into a linear pattern of analysis by using a classification system like the one outlined by Gabriel (2000); but that would not be consonant with the aims of narrative analysis and qualitative research. Frye (1990) cautioned that while the natural and biological sciences have made use of categorization and typologies as the basis for formal explanation in the human realm of meaning, narrative categorizing does not produce the same power of explanation. For example, knowing that a sentence is declarative, or that a story is a tragedy or a comedy, does not provide its particular and essential meaning. But using a classification system of sorts was a good place to begin the process of uncovering the deeper meaning of the stories that were collected, especially in the first round of analysis. To compensate for the interpretive deficits that might have resulted from using an established classification system, the theories of other authors were used in the second and third rounds of analysis to examine the data from different perspectives, explore the deeper meaning of the data, and tease out possible alternative interpretations.

Boje, Fedor and Rowland (1982) made the point that narratives elicited in interviews frequently differ in several ways from those which occur in more spontaneous situations. In an interview the form and content of the narrative is heavily influenced by the fact that it is primarily an answer to the interviewer's questions. Indeed, the disadvantage of eliciting stories is that the researcher risks imposing their definition of what is important, meaningful or enjoyable on the response of the interviewee (Boje, et al, 1982).

Boje, Fedor and Rowland (1982) added that there is usually a disparity in status and authority between the interviewer and interview participants; therefore the interaction in an interview is usually more formal and more controlled than spontaneous. Great care was taken to put interviewees at ease, and open-ended questions were used to guard against the inherent pitfalls of a structured interview format. Interviews combined with shadowing the participants in the course of their workday helped to keep the data fresh and spontaneous. No doubt the researcher was at times viewed as an expert, and her status as a retired Navy commander—a title and position that holds considerable authority in the Navy—was probably initially intimidating to some of the potential participants. But mitigating factors that enhanced candor in both the interviews and observations were the researcher's age—she was older than all of the participants—and her retired status—although she had been a Navy commander she was a civilian at the time of the data collection and therefore had no formal authority over the participants.

Other major limitations of this study were the restricted scope due to the small population size and sample, limited time, and limited resources. As is the case in most qualitative research, the validity of generalizing from this study to a larger universe is tenuous at best. That being said, the population size and sample, as well as the methods of analysis, were adequate to address the research questions, albeit in a limited way.

Finally, the physical environment of the ship presented some challenges and limitations. It is important to understand that a ship at sea hums and throbs with activity 24 hours a day. Most of the military people on the ship work in 12 hour shifts, typically 12 hours on and 12 hours off. So while a ship at sea is a data rich environment for a researcher engaged in participant observations, it is also a noisy, sometimes hazardous, industrial environment, and the individuals being observed were engaged in their work; therefore it was impossible to audio record all interviews and conversations.

Significance of the Study

A review of the literature revealed that a systematic study of sea stories in the sea services had never been done. The literature review suggested that narrative helps people in organizations make sense of the past, cope with the present and navigate into the future. It has been suggested by some researchers that an understanding of narrative may help people and organizations successfully adapt to a rapidly changing world. As an organization the Navy is always searching for ways to solve problems and to more effectively accomplish its mission; therefore, it is likely that members of the Navy will be open to, and find some benefit in, the findings and recommendations of this study. Although limited in scope, it is hoped that this study will help people in the Navy better understand the power and potential of story.

This study was also significant in that no other study has explored the meaning of organizational stories using the unique combination of narrative and complexity theories the way this study does. In addition, no other study has used the unique combinations of research questions used in this study. Finally, this study will add to a growing body of literature on the role of narrative, especially in story form, and the unconscious or preconscious role of antenarrative, in organizations.

CHAPTER II

REVIEW OF THE RELATED LITERATURE

Overview

While the ancient Greeks were the first to focus on story types and advance speculation concerning the nature of their content, the acceptance of narrative, including story and storytelling, as a legitimate subject of research did not gain credence until the mid to late 20th century when a diverse group of thinkers—including folklorists (Bettelheim, 1970), mythologists (Campbell, 1973, 1988), anthropologists (Geertz, 1973a, 1973b; Mead, 1934), sociologists (Boyce, 1995, 1996), psychiatrists (Jung, 1964), philosophers (Barthes, 1972, 1975; Ricoeur, 1984, 1991, 1992) and linguists (Labov & Waletzky, 1967; Van Dijk, 1975)—started to seriously study narrative and use it to advance their work. Consequently, the organization research utilizing a story paradigm was built upon a larger foundation of work on narrative by scholars in diverse fields of study.

Despite the work of some highly respected scholars, the relationship between academic research and storytelling remained ambiguous throughout much of the 20th century, and organization studies employing a story paradigm that described systematic or empirical methods in detail remained sparse (Czarniawska, 1997, 1998; Gabriel, 2000, 2004). Much of the early foundational organizational research informed by narrative theory involved studying the content of stories to identify common themes, common threads, common elements and common concerns in stories, myths and legends (Gabriel, 1991, 2000, 2004). But it was discovered that taxonomies and typologies of narratives or their discreet components—were of limited value (Boje, 2000). Most researchers who have chosen to explore narrative in organizations have adopted qualitative, or mixed approaches, over quantitative approaches, because they have found, as Schein (1990) said with respect to narrative and culture studies, "We are still operating in the context of discovery and are seeking hypothesis rather than testing specific theoretical formulations" (p. 109).

Quantitative social science instruments such as those employing survey instruments with Likert-type scales have been problematic in narrative research in that they assume knowledge of the relevant dimensions to be studied and in so doing bias the findings of themes rather than letting them emerge from the data. Researchers seeking to validate their analysis through traditionally accepted empirical methods, that included replication of findings and conclusions as valid predictors of future phenomena, faced a daunting task. Therefore, research using a story paradigm focused heavily on discussion of theory rather than proving or disproving hypotheses with confirming or disconfirming data (Schein, 1990).

That being said, organization studies using narrative theory moved from an interest in story content alone—and an attempt to get at meaning through quantitative methods—to a more holistic study of story utilizing qualitative methods (Boje, 2001; Georges, 1969; Robinson, 1981). Researchers interested in how organizations work began to explore the dynamic, living quality of stories, including how they could be used purposefully (Boje, 1991, 1995, 1998, 2001; Boje, et al., 1982). An early landmark study by "action researchers" working within an organization (Mitroff & Kilmann, 1975) explored the role of story in organizations and proposed that stories could be used to tackle organizational challenges and move organizations in a desired direction.

This study of story in the Navy explored in greater depth some common threads in organizational narrative and story research clustering around several themes that consistently appeared in empirical research informed by narrative theory. The themes that were explored are: (a) how stories help people make sense of the past, (b) how stories help people cope with the present, (c) how people use stories to navigate into the future, and (d) how principles of complexity science theory help to explain how and why stories seem to function the way they do within organizations.

That is not to say that the findings of the literature review concluded that studies of story fall neatly within the framework of the research questions. Indeed, if any conclusion can be drawn from the literature review it was that people in organizations have used story, perhaps even a single story, in a wide variety of contexts to accomplish multiple purposes, perhaps at different times. But there did seem to be thematic threads in the literature review that addressed the themes outlined by the research questions.

Sense Making and Sense Giving

A number of studies have suggested that people in organizations have used stories to make sense of what has happened to them. Many such studies explored the role of story in humanity's quest for meaning, order and interpretation of reality in order to cope with dissonance, contradiction and ambiguity (Baldwin, 2005, p. 10; Boyce, 1995, 1996; Brown, 1982; Bruner, 1990; Campbell, 1973, 1988; Czarniawska, 1997, 1998; Dunford & Jones, 2000; Gabriel, 1991, 2000, 2004; Georges, 1969; Gioia & Chittipeddi, 1999; Mahler, 1988; Maitlis & Lawrence, 2007; Polkinghorne, 1988; Prusak, et al., 2005; Weick, 1993, 1995). In order to understand how sense making helps people comprehend the past—as well as cope with the present and navigate into the future—it is important to understand what is meant by the terms "sense making" and "sense giving."

Weick (1993, 1995) used the term "sense making"—with respect to narrative theory—and specifically focused on the sense making function of story in organizations. Many other authors adopted the term to describe the quality and function of story that helps people comprehend complex and sometimes confusing situations. Many authors, including Gabriel (2000) and Boje (2001), incorporated much of Weick's theory—with respect to sense making—into their theories. The term "sense making" will be used in this study as a label for the process that people go through as they attempt to cope with the dissonance that arises from their functioning in organizations (Weick, 1995).

Gioia and Chittipeddi (1999) coined the term "sense giving." A number of authors have addressed how people in organizations often perform a sense giving as well as sense making function. Sense givers make sense of a situation themselves, or do so in dialogue with others, and then perform the role of framing their interpretation of events for others so that others in turn can make sense. Several studies found that leaders play a predominant sense giving role in organizations, but other organizational stakeholders may also perform a sense giving function, especially if they are perceived as subject matter experts, or if the leaders in the organization are viewed as incompetent (Dunford & Jones, 2000; Maitlis & Lawrence, 2007).

The interest in stories and sense making in organizations had its underpinnings in research into how people have used stories to make sense of what has happened in their personal lives. Weick (1995) described sense making as follows, "Someone notices something in an ongoing flow of events—something in the form of a surprise, something

that doesn't fit—there is a discrepant set of cues...sense making is retrospective, social, ongoing, driven by plausibility rather than accuracy and extracted by cues" (p. 2). The person experiencing the dissonance speculates—that is to say they try to explain—why the cues are "discrepant" or why something did not fit with the established pattern. Often what results—as the individual attempts to deal with the dissonance—is a story complete with a beginning, middle, end and a plot, that brings the disparate parts into a sense making whole (Weick, 1995).

Weick (1995) maintained that the flow of events did not have a beginning, middle, end, or a plot; rather, that the individual retrospectively imposed that framework upon the experience. The stories that resulted can then be used to not only help people comprehend the past but they also can help people deal with emerging situations, thereby alleviating present and even future dissonance. A good story holds disparate elements together long enough to energize and guide actions. A good story is engaging enough that others will make it their own, or put their own spin on it (Weick, 1995).

A number of authors—in addition to Weick (1995)— concluded that people think narratively and that stories serve as sense making, and sense giving, guides to conduct by facilitating the interpretation of cues turned up by that conduct (Czarniawska, 1997; Gabriel, 2000; Polkinghorne, 1988; Weick, 1995). But of all the authors who referred to the sense making and sense giving properties of story it was Weick (1995) who explored and focused on the sense making properties of story to the greatest extent.

Weick (1995) found that vivid, tell-able, noteworthy and interesting stories, were those that departed from shared norms of experience, and prevailing frames of reference in four ways: (a) the actions described a difficulty of some kind, (b) the situation posed a predicament that could not be handled in a routine manner, (c) unexpected events happened in an otherwise normal sequence of events, and (d) something about the situation was unusual in the narrator's experience. Weick suggested that interesting stories included cues that evoked a mixture of fear and curiosity, and that vivid stories included discrepant cues that represented an ongoing search for a frame of reference (Weick, 1995).

Weick (1995) said that many crises have occurred when improbable events were strung together resulting in interactive complexity. When stories overstated the strength of causal ties, they simulated the effects of tight coupling in a complex world. He suggested that stories help people in organizations rehearse implausible sequences, thereby enabling members to better cope with crisis when it occurs.

Even though the referent events were more loosely coupled, stories about them say essentially if it were a tightly coupled world—which could happen under crisis conditions—then this is what could happen so stay alert! Story of a near miss has a tighter coherence than does the world itself where the connection between events is often indeterminate and wherein sequences have neither clear-cut beginnings nor orderly endings. (Weick, 1995, p.130)

Weick (1995) said that stories provided tools for diagnosis but that they also served to reduce the "arousal" that can interfere with sense making in an actual crisis situation. He suggested that problems of sense making can be especially severe in organizations where people work among complex interdependencies that can generate implausible outcomes—such as fire fighting, police work, or the military (Weick, 1995).

Weick (1995) explained that as pressure increases people focus on central aspects of task performance and neglect peripheral cues that may be key to successful outcomes. Key information is lost which means that some interaction about task elements is forgotten, misunderstood, or ignored. Weick suggested that recollection of a story could slow down escalation in a frightening situation, and thereby slowing the rate at which pressure builds. A well-rehearsed story can help people simplify the task at hand and help them tolerate more pressure. Stories can reduce the element of surprise; they can act as a forewarning. Once the pressure is reduced, and the pace is slowed, people can be more attentive to both central and peripheral cues. Furthermore, Weick suggested that while stories may help to manage pressure and improve sense making during emergencies they may be even more helpful in the prevention of emergencies because dealing with imagined threats-for obvious reasons-is far less dangerous than dealing with actual threats. Imagined threats can be examined more thoroughly and comprehended more fully than can actual threats and imagination is less handicapped by forced inattention to potentially important cues (Weick, 1995).

A review of Weick's (1993, 1995) research is particularly pertinent to this study because Weick was especially interested in studying organizations involved in dangerous, high-risk operations—including the military—and the sense making attributes of stories in high-risk organizations. He studied the role story has played in preparing individuals, and groups of people, for crisis situations. He laid out in detail an example of story's connection to sense making in his analysis of the Mann Gulch Disaster—a failed fire fighting attempt that occurred in the mountains of Montana in 1949, resulting in the deaths of 13 men (Weick, 1993). In the Mann Gulch Disaster, Weick found that role, structure and sense making disintegrated when a highly select group of fire fighters faced a fire that did not respond like any other fire in their previous training or experience (Weick, 1993, 1995).

In his study of the Mann Gulch Disaster, Weick (1993) analyzed post-disaster interviews, archival records, direct observations recorded in memos, and personal experiences gathered for a book written about the incident. Weick found that decision making in the Mann Gulch Disaster was highly contextual and that although the fire fighters had been good at decision making in numerous situations in the past they still faltered in their attempt to fight the Mann Gulch fire because of deficient sense making. He reasoned that when people are under pressure they regress to their most habituated ways of responding, and that under life threatening pressure it is difficult for people to be creative. Weick concluded that stories could safely prepare people for crises by rehearsing both plausible and sometimes seemingly implausible circumstances before they actually occurred. While Weick did not draw a direct link between story and sense making in military situations he referred to studies and analysis of accidents that occurred during flight operations on aircraft carriers to support his conclusions in the Mann Gulch Disaster (Weick, 1993).

Weick (1995), as well as others (Boje, 1991, 2001; Boyce, 1995; Polkinghorne, 1988; Wilkins, 1979, 1984), also drew a connection between sense making and reality. "Reality is an ongoing accomplishment that emerges from efforts to create order and make retrospective sense of what has occurred" (Weick, 1995, p. 15). Weick (1995)—as well as Boje (1991, 2001), Polkinghorne (1988) and Wilkins (1979, 1984)—maintained that individuals are not so much living out their lives in relation to a wider reality but rather creating and sustaining images of a wider reality in part to rationalize what they are doing. Sometimes expectations do not match reality and the result is a sort of reality shock. Meanings may be consciously or unconsciously developed, and they are often adapted to the situation at hand (Boje, 1991, 2001; Prusak, et al., 2005).

Gabriel (2000) examined the process whereby events within an organization are turned into stories through interpretation. Through interpretation the storyteller uses poetic license to make connections and create meaning. "Poetic interpretation is the core part of story-work in organizations through which events are "infused" with meaning or meaning is "discovered' in the facts" (p. 35). Gabriel called these interpretations "poetic tropes," and described them as the "storyteller's central interpretive devices" (p. 36). "Each one of these tropes represents a way of either making sense of specific parts in the narrative or making connections between different parts" (p. 36). Poetic tropes are used to support particular interpretations; thus sense making and sense giving become a political process through which storytellers attempt to influence others. Some interpretations appear to resonate with others while others are rejected (Gabriel, 2000).

Maitlis and Lawrence (2007) found that a gap in organizational sense making processes "triggers sense giving processes" (p. 58). They used qualitative methods (interviews, observations and documentary analysis) to study the "triggers and enablers of sense giving" (p. 80) in three British symphony orchestras. And they identified members, mostly the leadership of the orchestras and other stakeholders, who initiated sense making and sense giving for their organizations. They determined that "sense giving can be a crucial element in facilitating acceptance, enthusiasm and energy for change." Like Giola and Chittipeddi (1991), they found that sense giving is a critical process through which a common interpretation of reality is constructed. They found that "issues are noticed, shaped, interpreted and sold by some members to others with important consequences" (Maitlis & Lawrence, 2007, p. 82).

Czarniawska (1997, 1998) labeled the narratives she collected "tales from the field" (1998, p. 13), recognizing that any tale from the field reflects a subjective understanding of an objective reality. Like Weick (1995), Czarniawska viewed narrative as a conversational, sense making and sense giving device through which meaning was negotiated for the people in the organization. Like Weick (1995), and Gabriel (2000), Czarniawska also drew a connection between sense making and reality in her description of the circular property of stories, noting that through "storying" (1998, p. 15) facts are turned into stories and stories are turned into facts thereby establishing a collective view of reality (Czarniawska, 1997, 1998).

Czarniawska (1997, 1998), like Weick (1993, 1995), maintained that humans have an innate need to try to make sense of their world. She applied narrative method to the qualitative research she did with public sector organizations in Europe. In one study she shadowed top city officials in three different divisions of a city government: a finance department, a waterworks department, and a public transportation department. She conducted interviews, wrote field memos on observations, and reviewed documents such as news clippings. She used basic hermeneutic theory and literary criticism techniques to inform her interpretations. Czarniawska (1998) described a good sense making story as:

(a) something that preserves plausibility and coherence, (b) something that is reasonable and memorable, (c) something that embodies past experience and expectations, (d) something which resonates with other people, (e) something that can be constructed retrospectively but can also be used prospectively, (f) something that captures both feeling and thought, (g) something that allows for embellishment to fit current oddities, and (h) something that is fun to contrast. (p. 15)

Czarniawska (1998) found that the people in the organizations she studied used story to make sense of what was happening around them. While she did not get into great detail regarding exactly how she analyzed the stories she collected for sense making attributes, she did explore in detail the meaning of some of the stories she collected and she concluded that a good story resulted in sense making (Czarniawska, 1998).

Boyce's (1995, 1996) findings supported the findings of other authors with respect to sense making and sense giving in organizations and what she called "collective creation of reality" in organizations. In her study of *Collective Sense Making in Organizations* she gathered individual and collective stories from three organizations: a semi professional sports team, a ballet company, and a non-profit agency (Boyce, 1995, 1996).

Boyce (1995, 1996) observed and noted the use of story in meetings and informal settings within the organizations she studied. She conducted, transcribed and interpreted individual interviews, as well as structured storytelling events, during which participants reflected together on the stories that circulated within the organization. In one organization she compared the stories of employees in one geographic region with the stories of employees on the other side of the country, and found common themes and threads that seemed to help employees collectively center on the deeply held values and what she described as the organizational reality. She observed that the people in the

organizations she studied used story telling, sometimes collectively and sometimes deliberately, to make sense of their lives within the organizations. She found that story helped the members of the organization collectively bond with one another. Some stories appeared to be what she called "touch stone" stories (Boyce, 1990, p. 45); that is to say, they seemed to coalesce individuals around certain themes that appeared to reflect the essence of the organization. She found that sense making happened individually as well as collectively and that collective sense making happened when groups interactively created a social reality that eventually became the organization reality (Boyce, 1995, 1996).

Coping with the Present

Stories help people cope with the present in a number of ways. Stories can be cathartic, thereby diffusing tension in otherwise stressful situations. Stories can be simply pleasurable, hence the popularity of story from antiquity to the present. But an area of study that is particularly relevant to this study was the connection between stories and organizational culture. As was discussed previously, through sense making and sense giving people in organizations negotiate a shared and agreed upon view of reality. Likewise, a commonly agreed upon view of reality is a reflection of the organization culture—including values and principles—a theme that was explored by a number of researchers interested in the role of narrative in organizations. In order to understand how organizational culture, communicated through story, helps people cope with the present it is important to understand what is meant by the term "organizational culture" and the term "culture" in general.

The concept of organizational culture was not recognized until fairly recently. Until the later half of the 20th century it was largely assumed that organizations reflected their dominant national or ethnic cultures, but with a growing interest in industrial psychology as a way of understanding differences in the success rates of seemingly similar organizations the recognition of differences in cultures, or subcultures within a dominant culture, gained relevance (Schein, 1990).

For the purposes of this study culture was defined as:

(a) A pattern of basic assumptions, (b) invented, discovered or developed by a given group, (c) as it learns to cope with its problems of external adaptation and internal integration, (d) that has worked well enough to be considered valid, and therefore (e) is to be taught to new members as (f) the correct way to perceive think and feel in relation to those problems. (Schein, 1990, p. 111)

Story is only one way that organization culture manifests itself, but story has proven to be a particularly rich artifact for those seeking to understand the underlying values and assumptions within organization cultures or subcultures. Many studies on the subject of narrative in organizations repeatedly referred to the ways that stories reflected the culture of the organizations in which they were found (Boje, et al., 1982; Boyce, 1996; Brown, 1982; Dandridge, et al., 1980; Feldman, 1990; Gabriel, 2000; Hansen, 1993; Mahler, 1988; Martin, Feldman, Hatch, & Sitkin, 1983; Peters & Waterman, 1982; Pettigrew, 1979; Polkinghorne, 1988; Schein, 1983, 1985; Thorpe, 1986; Wilkins, 1984).

Several researchers (Gabriel, 2004; Hansen, 1993; Weick, 1995) used story components to develop a kind of psychological profile for an occupational culture and

many—notably Boyce (1996), Gabriel (2000) and Weick (1995)—used a classification system to code and examine stories for psychological characteristics and content themes that reflected the values of the culture. At least two studies found that members of the same occupational subcultures tended to tell stories that were more alike than different even though they represented different industries and businesses (Gabriel, 2000; Hansen, 1993). Their findings suggested that examining stories was an effective way to uncover unspoken and perhaps unconscious norms within an organization subculture.

Most of the researchers who addressed the cultural role of narrative in organizations maintained that cognitive frames of reference were reflected in the storylines of organizations, and that stories provided an accessible road map for individual, managerial and organizational success. Most of the studies that addressed narrative and organizational culture suggested that stories are accepted as a means of communicating interpersonal norms through the narration of past events and problems that were resolved often leading to a moral. Some studies suggested that not only do stories reflect culture—they actually play a role in its creation (Bruner, 1990; Hansen, 1993; Mahler, 1988; Wilkins, 1984).

In a relatively early longitudinal study of the culture of an organization, Pettigrew (1979) studied the narratives surrounding a sequence of "social dramas" (p. 570) in a British boarding school to examine how the organization grew, evolved, transformed and eventually decayed. Pettigrew interviewed a sampling of current and former staff and pupils who were at the school from 1930 to 1972. He did not include the exact number of interviews in his description of the study but the number appeared to be diverse, and sufficiently large to support his conclusions. He enhanced triangulation by supplementing

interviews with analysis of private papers, speeches, administration documents, and other archival materials (Pettigrew, 1979).

The narratives Pettigrew (1979) found surrounding the social dramas—such as the replacement of the founding headmaster—appeared to be what Schein called touchstone myths that were related by a diverse group of individuals within the organization over time to explain the need for structural changes at the school. Pettigrew concluded that the myths he identified played a crucial role in determining, establishing and maintaining what was acceptable and unacceptable in the organizational culture of the school. He suggested that while the term "organizational myth" (p. 576) is often used pejoratively—to describe erroneous beliefs that prevail against evidence to the contrary—organizational myths could actually be a powerful positive force. He found that the myths he identified provided continuity by anchoring the present in the past. The myths he uncovered offered explanations and legitimacy for social practices, and they contained levels of meaning that dealt with what was socially and psychologically significant within the organization (Pettigrew, 1979).

In her study of employee narratives collected in a nursing home setting in Texas, Brown (1982) found that story use changed, especially in form and function, as members moved through the socialization process of the organization. She conducted structured interviews with the nursing home employees to collect the stories they told and heard in the course of their work. She transcribed her interviews, isolating stories—her unit of analysis—in the course of her study. She used a variation on a grounded theory approach by combining categories that she collected from her literature search with categories that emerged in her data collection. In this way she was able to develop categories of stories and the functions they played in the organization she was studying (Brown, 1982).

Brown's (1982) literature review surrounding socialization suggested three categories that were important in discussing the link between employee socialization to the culture of the nursing home and stories: (a) socialization stages, (b) story form, and (c) story function. She then developed three other categories of story function developed from prior research: (a) stories with a descriptive function, (b) stories with an energy controlling function, and (c) stories with a systems maintenance function. She found that the stories she culled from her interviews largely fit the categories described. She found that storytelling increased as employees passed through the various socialization stages in the organization with newcomers telling fewer stories than veterans; and that as members gained seniority their stories became more closely associated with the organization's values and culture. Brown concluded that stories served as a means for members to express their knowledge, understanding and commitment to the organization.

Martin, Feldman, Hatch and Sitkin (1983) found that a culture's claim to uniqueness, as expressed through its stories, was perhaps not so unique. They systematically searched for organizational stories in organizational literature and the unpublished institutional histories of a wide variety of organizations. They analyzed the content of stories to uncover their deeper meanings. While they did not get into great detail regarding exactly how they collected the stories or analyzed their content they did include examples from a wide variety of organizations to illustrate their point (Martin, et al., 1983). Martin, Feldman, Hatch and Sitkin (1983) presented seven common themes of stories that occurred in a wide variety of organizations, ranging from how the organization handled employee mistakes and employee rule breaking to how the organization took care of its employees in time of need and handled obstacles. While they did not list or name all of the organizations they canvassed they did include examples to illustrate that the seven common story types they found occurred in virtually identical form in a wide variety of organizations. They did not attempt to count the frequency with which the seven story types occurred because each of the sources of stories was compiled by different people for different reasons and none was designed to be a comprehensive listing of all stories told in a given setting. Thus the authors did not claim that the seven common story types they found necessarily occur in all settings; they simply noted that these seven common story types occurred with great regularity in a wide variety of contexts (Martin, et al., 1983).

By classifying stories into common types, Martin, Feldman, Hatch and Sitkin (1983) implied that some elements of the contents of texts, and perhaps some aspects of organization life, generalized across different contexts and time periods. For example they found that "obstacle stories" frequently occurred in the organizations they studied and answered such deeply held concerns as: "Will I get fired if I break this rule? What do I do when a high status person breaks a rule? Will the organization support my needs in a time of crisis?" Martin et al. suggested that such "archetypal" stories reflected concerns with dualities such as equality vs. inequality and control vs. lack of control. They found that some common story types proliferated while other stories have not survived. They found that the stories that survived enabled employees to identify with a benevolent

organization, or to distance themselves from a less desirable institution. They suggested that stories provided an organizing framework for understanding reality, expectations, event chains, and abstract concepts. They concluded that stories act as a cultural code, and that stories have implicit morals that reflect the shared values and belief systems of the organizational culture—this shared perspective is often referred to as "the way we do things around here" (Martin, et al., 1983).

Like Martin, Feldman, Hatch and Sitkin (1983), several authors found that stories concerning organization founders are common across industries and such stories communicate the values of the organization culture. Peters and Waterman (1982) in their case studies of 62 of Fortune 500's top performing companies found that stories were used to promote the legitimacy of a management philosophy, and that stories served as a common guide for influencing behavior and attitudes which resulted in organizational excellence. Peters and Waterman (1982) did not set out to specifically study the role of story in the organizations they studied, nor did they set out with any specific theory in mind. Their tasking, as management consultants, was to study the organization, structure and employees of the successful companies. Blessed with a large budget and a generous amount of time, they were able to record hundreds of hours of interviews with individuals at all levels of the organizations they studied. They, and their staffers, then independently poured over the recording transcripts and culled out seven themes that became the well known "McKinsey 7-S Model" for organizational excellence. They concluded that story played a pivotal communication role in the organizations they studied, especially with respect to transmitting the values of the organization (Peters & Waterman, 1982).

Similarly, Schein (1985), in his case studies of successful leaders conducted over many years as a management consultant, found that anecdotes about the founders and leaders in organizations took on a mythic quality and served as guideposts for future actions. Like Peters and Waterman (1982), Schein (1985) did not set out to prove or disprove any specific theories and he did not describe his data collection and analysis methods in detail, other than to say that he approached the study of organization culture holistically; but through his interviews with leaders and the people who worked with them (he did not list the exact number of interviews) he was able to isolate themes, and the characteristics of successful leaders. While Schein (1985) did not focus specifically on the role of story in his studies, he included numerous examples of anecdotes in his findings, and concluded that stories told by leaders, and about leaders, played a crucial role in transmitting organization values and guiding the direction of the organizations and leaders he studied.

In her case study of Pacific Bell, Thorpe (1986) examined how information organizations viewed the world. Her primary focus was on the internal corporate environment and how it was managed through selected, or unintentional, story telling and corporate myths. She used critical hermeneutics theory, largely the theories of Ricoeur, to frame her study. Her assumption from hermeneutics theory was that the truth is negotiated by both the researcher and the participant and is not solely the domain of an objective observer. Her methods included data gathering through structured interviews involving ten questions. The interviews lasted one to two hours per individual—including both managers and technicians—for a total of 22 audio taped interviews. She then transcribed the interviews and allowed participants to review their responses to add, subtract or clarify the information submitted. She then read and reread the transcripts, highlighting and noting themes as they emerged, and regrouping themes into categories. She compared and contrasted themes, developed a catalog of themes that reflected the underlying cultural values at Pacific Bell. Themes such as "grow or die" and "America needs communication to survive" emerged from her analysis (Thorpe, 1986).

Thorpe's (1986) data analysis largely supported the findings of other researchers with respect to organizational culture such as:

(1) Myth is an inherent part of organizational cohesiveness, (2) clearly defined corporate myths can teach corporate values and stabilize an organization in flux, (3) accurate corporate myths can be used as a screening device for potential employees to discern value systems, (4) the conscious use of corporate myth by managers and consultants can enhance the strategic planning process by adding vision, purpose and commitment to a goal, (5) the appearance of new myths may be used as a barometer to detect changes in company values long before they are observable in articulated goal statements by employees and managers, (6) inconsistencies of old and new myths can be explored and subjected to discourse to achieve cohesion, commitment and harmony, (7) a new myth can provide a sense of security at the same time an organization is undergoing rapid change. (Thorpe, 1986, p. 220)

In his review of narrative research theories, Polkinghorne (1988) described how various narrative theories (approximately 20 different researchers and theorists on the subject) used narrative in their investigations to describe, explain and explore human

behavior and cultural stocks of meaning. In his discussion of various narrative theories and approaches he critiqued the tendency of theorists to assign narrative, or parts of narrative, to categories, explaining that such typologies had limited usefulness because they failed to answer the question of why the story was being told at all. He suggested that "the why" of narrative is what makes it interesting to human science researchers. But he added that most theorists have agreed that, "like formal science research, descriptive narrative research involves detection, selection and interpretation of the data—which in narrative is the text—and the common cultural presuppositions necessary for understanding it" (Polkinghorne, 1988, p. 169).

Polkinghorne (1988) said that it is the narrative explanation, as opposed to an explanation by law or correlation, that makes narrative research especially rich and different from the research ordinarily undertaken in the human sciences. He also said that narrative explanations could be valid despite the fact that they "do not derive from universal laws and may not necessarily provide a basis for prediction" (Polkinghorne, 1988, p. 170).

Hansen and Kahnweiler (1993) found a link between narrative and corporate cultures in their extensive study of the role of narrative using data from Fortune 500 companies. They described stories as "tribal codes" for establishing order in all societies and found that just as stories contained rules for family relationships, in corporations stories reflected unwritten codes for supervisor and employee interactions (Hansen & Kahnweiler, 1993).

Hansen and Kahnweiler (1993) studied the narratives of two groups of individuals, business leaders and human resources professionals employed in 15 large organizations, including such industry giants as Delta Airlines, Coca Cola, Marriott, Equifax and Xerox. Their data sources included transcribed story narratives and transcribed semi-structured interviews as well as memos of field observations. To enhance triangulation and reliability they collected data from multiple sources and they employed multiple analysts (Hansen & Kahnweiler, 1993).

Like most other researchers who studied the role of stories in organizations, Hansen and Kahnweiler (1993) developed a classification system to code and examine stories for psychological characteristics and content themes. The stories they collected were analyzed for the underlying belief systems of each group. Hansen and Kahnweiler then looked for shared psychological characteristics in the organizations and the two groups. They asked subjects—30 in each group—to tell a story about any event portraying any cast of characters that could have occurred in their organization within the last six months. In an interesting twist on the semi-structured interview technique, they used imagery to assist subjects in creating stories. Participants were shown twelve randomly ordered line drawings depicting typical corporate work scenes, such as people working together, under the assumption that individuals tended to visualize when they recounted past experiences. Stories were recorded verbatim. An interview protocol was used to elicit details about the main and supporting characters, plots, turning points, endings and morals (Hansen & Kahnweiler, 1993).

Hansen and Kahnweiler's (1993) analysis confirmed the existence of cognitive frames embedded within stories that supported the internalization of corporate norms and confirmed that such norms provided a means through which organizational behaviors are managed. A large number of the stories they collected described employee fears and uncertainties resulting from competition, mergers and acquisitions, and feelings of a lack of empowerment. Most of the stories indicated a greater concern for the decision making process than the outcomes. Plots conveyed strong anxiety about the inability to control the means and standards required to perform quality work. Morals emphasized the need to establish and maintain professional credibility and viability (Hansen & Kahnweiler, 1993).

Hansen and Kahnweiler (1993) found that stories were more likely to be remembered than other forms of written or oral communication. Hansen and Kahnweiler found that storytellers in both groups conveyed a sense of hope and optimism by closing with twice the number of happy endings as negative or unresolved ones. They found that subjects identified heroes and villains in the story dilemmas they related, and that heroes overcame adversity to achieve their goals. Hansen and Kahnweiler found through their analysis of the stories told in the organizations they studied that being assertive, being a team player, taking risks, and personal commitment were highly valued qualities and linked to effective leadership. They also found that stories provided a short-cut for new members to learn about an organization's culture and their findings suggested that stories are an effective way to uncover unspoken and perhaps unconscious norms within organization subcultures (Hansen & Kahnweiler, 1993).

While the themes that Hansen and Kahnweiler (1993) identified were highly speculative, their findings prompted them to suggest that members of the same occupational culture tended to tell stories that were more alike than different even though they were located in different industries and businesses. And while their findings pointed to some commonalities across industries, they hastened to add that throughout their work they tried to remain mindful of the inherent tenets of ethnographic studies; that is to say that cultures—and by extension organizations—are not necessarily governed by universal laws or truths. Hansen and Kahnweiler posed some interesting macro questions for future research such as: Do companies in the same industry have similar stories as far as plot, heroic themes, and morals, and if so, why? What about companies of equivalent size but in different industries? Does the content of stories vary depending on the level of the person telling it? (Hansen & Kahnweiler, 1993).

Kleasen (2001) examined story's connection to organization culture in her study of collective memory in the American Boys Choir. She interviewed members of the organization soliciting stories about past performances. She asked interviewees to define performance excellence and evaluate recent performances. As a second source of data she examined internal and external documents produced by the organization in the form of communications with members and official releases. Grounding her analysis in phenomenology theory she analyzed the content of her data and found threads of coherent themes running through the stories and documents she had collected. She identified the "collective memory system" of the organization, finding that members' recollections of past events seemed to coalesce around similar interpretations and themes, especially over time. It was as if through sharing stories there was a conscious or unconscious attempt for members to get onto the same page with respect to their interpretation of events. Furthermore, she found that the individual and official visions for the future of the organization contained the same themes as the stories told about the past, identifying the same performance deficits and pictures of excellence (Kleasen, 2001).

Mahler (1998) uncovered themes that reflected the culture of the organization in the stories she collected at the Agency for International Development (AID). Using an interpretive approach, Mahler conducted in-depth, semi-structured interviews with 19 AID officials. The officials were selected to include a probable range of perspectives in the organization. The respondents were questioned about the agency's mission, how they came to join AID, the techniques used for orienting new staff to the agency, and their sources of commitment and motivation. Mahler looked for patterns and themes in the responses of participants. After themes were identified Mahler tallied the frequency with which respondents from different parts of the agency mentioned each theme to determine if there were relationships between the positions of the respondents and the content of the narratives (Mahler, 1988).

Mahler (1988) identified some classic themes in the stories the respondents told, such as "the quest myth"—the ability to endure, overcome hardships and prevail. She also found that some versions of stories achieved the level of myth through their frequent reiteration and that some such myths communicated deeply held values within the organization. One such story type that she categorized as a "quest myth" reflected the deeply held value among veterans of the organization concerning the necessity for field experience. Mahler found that stories about field experience not only reflected the need for field service as a tacit right of passage for members of the organization, but also reflected the deeply held value that members of the organization ought to have a personal desire to do field service—a trait that was often referred to as "being bitten by the bug." Indeed "being bitten by the bug" was such a highly regarded value within the

being in the organization. She found that members of the organization used field service stories to guide their actions and explain their rationale for decisions long after they had left the field (Mahler, 1988).

Stories Help People Navigate into the Future

While people in organizations use sense making and sense giving to negotiate a shared view of reality so that they can make sense of the past, and while organizational cultures reflect a shared view of reality so that people can cope with the present, it is important to note that the use of sense making and sense giving cannot be neatly relegated to past or present time frames within organizations. Sense making, and sense giving, functioned in the past and the present as well as the future in organizations. The following section discusses how stories used to make sense of the past and cope with present—through sense making and sense giving—can result in cognitive maps that also help people within organizations move into the future, sometimes in very creative, dynamic ways.

Authors in a variety of disciplines suggested that stories could function as cognitive maps that help people within organizations move into the future. And a number of authors addressed the ontological and autopoetic quality of stories in organizations that resulted in their ability to help organizations—and the people within them—adapt to ever changing internal and external environments (Adamson, et al., 2006; Bettelheim, 1970; Boje, 2001; Boyce, 1995, 1996; Brown, 1982; Campbell, 1973, 1988; Dandridge, et al., 1980; Gabriel, 2000; Mahler, 1988; Martin & Powers, 1983; McKenna, 1999; Wilkins, 1984). Some authors described stories as fluid and ever changing in order to adapt to the organization's environment—not unlike living organisms—thereby suggesting that, due to their plasticity, stories could be used consciously to move an organization in a desired direction (Adamson, et al., 2006; Boyce, 1995; Denning, 2001, 2005a, 2005b; McKenna, 1999; Mitroff & Kilmann, 1975; Shaw, et al., 1998). Such suggestions pose intriguing possibilities for members of organizations, leaders of organizations and consultants to organizations.

Mitroff and Kilmann (1975), in their seminal study of the use of narrative in organizations, concluded that stories could be used proactively. They systematically studied managerial autobiographies, conducted interviews at all levels of the organizations they studied, and evolved a technique for eliciting organizational myths. Through their analysis they drew a connection between stories and decision making, as well as stories and group cohesion. Yet they found that most managers are only dimly aware of the existence of stories in their organizations, much less their ontological role in decision making and their potential to bring about organizational cohesion or change. "Most of us have to be trained not only to recognize stories but also to appreciate their significance . . . stories are like dreams they need to be gotten at indirectly because direct approaches may drive them further underground" (Mitroff & Kilmann, 1975, p. 19).

Since stories have "an illusive, almost subliminal" quality, Mitroff and Kilmann (1975) asked managers to write a story about their ideal organization, after which they asked them to talk about their current organization. They found that it was easier for most managers to readily recall a story about their real organization after they had told a story about an ideal organization. Through the use of a short personality test they classified managers by Jungian personality types; that is to say, they determined how the managers tended to take in data from the outside world—such as by sensing, feeling, thinking or

intuition—under the assumption that most individuals tend to use one kind of data input process rather than the other, to varying degrees and in varying combinations. They found that managers with the same personality type tended to tell the same kind of stories about their concept of an ideal organization (Mitroff & Kilmann, 1975).

Mitroff and Kilmann (1975) concluded that perhaps the greatest value in sharing stories was that stories had the ability to sensitize managers to other realities, and they concluded that the phenomenon of storytelling can positively impact problem solving, especially in situations in which managers of different personality types are able to share their stories without fear or ridicule. What evolved through Mitroff and Kilmann's "action research" was a problem solving system, involving stories. They found that stories can promote the work of an organization by providing a common understanding of its values and purposes, and that the consultant can assist in the emergence of a new narrative that is more integrative and which addresses the tension of the organization better than the old one (Mitroff & Kilmann, 1975).

In a study involving the employees of a nursing home, Brown (1982) found that stories played an ontological—and sometimes an autopoetic role—in the organization. She categorized the functions of the stories she collected as: (a) descriptive, (b) energy controlling, and (c) systems maintenance. Brown suggested that stories served a "descriptive function" in the organization by providing modes through which the experience of working in the nursing home was conveyed. "Energy controlling" stories often served to release tension or inspire action, while "system maintenance" stories served to provide coherence, order and stability within the organization. She found that as members passed through the socialization stages in the nursing home they became increasingly able to tie events to their relevance within the organization through story use. She also found that some stories presented enigmas which were never really resolved, and that such stories kept reappearing as if the organization had a need to resolve the enigma the story presented. Brown found that as members moved through the socialization process in the nursing home they became increasingly able to use stories to perform desired functions.

In his research on *Organizational Stories as an Expression of Management Philosophy*, Wilkins (1979) found that key business themes, exemplified through widely shared stories, were a highly useful way of providing control and uniting members of an organization. In 1979, Wilkins interviewed and surveyed the managers and employees of two electronics companies for his doctoral dissertation on the subject. While his unpublished dissertation detailing his methodology was not available, the summary of his research—including some examples of widely shared stories—was sufficiently detailed to give credence to his findings (Wilkins, 1979, 1984).

Wilkins (1984) found that a major advantage of a story is that it can be told as an example of an idea rather than as a complete statement or specific rule about the idea that can be limiting. He also found that there could be enough different stories told about a particular theme to allow for rich and broad interpretation. For example in one of the companies he studied, engineers learned through stories that people making presentations to top management could expect to get "beat up." According to the "beat up" stories, presenters could expect to be yelled at and have their presentations torn to shreds, sometimes literally, when they did not meet the high standards of excellence demanded by top management. Such stories were often told about successful people in the company

who were able to survive the ordeal and move into the ranks of top management themselves. In fact, being "beat up" came to be viewed as a right of passage of sorts for "comers" in the company (Wilkins, 1984).

Wilkins (1984) found that often the members of the organization he interviewed could not define in mere words "the company way," but that they could define it using stories that were well known throughout the company. He concluded that shared stories which exemplified a key business theme or philosophy functioned as a map providing a way to explain to new employees—and served as a reminder to old timers—of "who we are and how we operate." Wilkins concluded that the company that had widely shared stories exemplifying the management philosophy had a much greater sense of unity than did the company with no shared stories exemplifying management philosophy. The sharing of a few classic stories seemed to give both managers and employees a concrete and shared sense of what was important in the organization, and a common vocabulary that helped people from different parts of the company communicate more easily with each other (Wilkins, 1984).

Similarly, Gabriel (1991, 2000, 2004) collected numerous examples of stories that appeared to socialize new members to the organization and reinforced the values of the organization, while enabling members to cope with problems they might encounter in the organization in the future. Gabriel found that stories and myths were often an attempt to humanize the organization and they were often a way of coping with pain and discomfort within the organization (Gabriel, 1991, 2000, 2004).

In the following example that is especially relevant to a study of sea stories because it involved navy recruits in a military camp, Gabriel (2000) described the ontological features of a story. The story was from Gabriel's own experiences in the Greek Navy. He said that it circulated widely among new recruits.

"Trial by Fire"

Sentry duty is one of the most tedious aspects of a conscript's life whether aboard a ship or on land. Alone for four long hours in a sentry box, he rarely meets anyone and practically never an enemy. The only regular visitor is the sentry officer who will come to check that the sentry has not nodded off, lit a cigarette, or surreptitiously smuggled a transistor radio into the sentry box. Above all the sentry officer will come to check that the sentry has not abandoned his post, that he has not moved more than a dozen steps from his box. This is the cardinal rule of sentry duty—under no circumstance is one to leave one's post. Should anything untoward happen, one is to contact the sentry officer on the telephone or failing that to fire one's rifle. During the briefing of new recruits by the officer responsible for sentries in a navy training camp the following exchange took place.

Officer (speaking to the assembled recruits)—Do you understand? You are never to leave your post under any circumstance.

Men—(nodding that they understand.)

Officer— So what would you do if you saw a fire?

Bright Recruit—I'll phone the sentry officer on duty.

Officer—Good, and if there is no answer from the sentry officer? Bright Recruit—I'll phone the commander. Officer— And if all the lines are dead?

Bright Recruit— I'll fire my rife.

Officer—And if the fire is spreading rapidly in the direction of the munitions depot?

Bright Recruit— I'll run and try to put it out.

Officer (beside himself with rage)— Idiot! If you are lucky you'll end up court martialed and in prison for six months. If you are unlucky you'll get a dagger in your back. This is what the enemy wants you to do—he wants to distract you with a diversion so that you quit your post so that he can polish you off. Now do you understand? You are never to leave your post! You should sooner see the whole camp go up in flames than quit your post. So, what do you do if you see something suspect and the phone lines are dead?

Bright Recruits—We fire our rifles!" (pp. 51-52)

Gabriel (2000) suggested that the message in this story was: do not ask questions, do not take any initiative, just follow the rules. He said that the story was related in a half jocular, half menacing manner—the manner in which many military stories are recounted. Gabriel (2000) said that in most stories of this type the good solider was the victim of some more or less funny, more or less unpleasant, prank staged by his officers or seniors. He said that jokes are often a safety valve for anxiety, but that some stories that are alarmist, such as "Trial by Fire," maintain a continuous and tangible level of anxiety that permeates the culture of the organization. Gabriel suggested that rather than reduce anxiety some stories do the opposite—they generate additional degrees of discomfort. Gabriel (2000) explained:

The psychic function of such stories becomes a lot clearer if we view anxiety not as a dysfunctional by product of mental processes but following the traditional warning signal in situations of real danger which alerts, protects and reduces the severity of the trauma. Anxiety produced and reproduced through alarmist gossip and horror stories ensures that military recruits are constantly prepared for the worst and when the worst happens the shock is somewhat diluted and the magnitude of the injury is reduced. (p. 54)

In their case study of Minnesota Mining and Manufacturing (3M), Shaw, Brown and Bromiley (1998) explored the proactive use of story at 3M. According to Shaw, Brown and Bromiley, 3M was the first large, multinational company to embrace the use of story in its strategic planning processes. In a break with conventional practice, executives at 3M decided to write the company's strategic business plans in narrative form rather than bullet form because they felt that the narrative format could be more comprehensively and clearly understood by the authors as well as the readers of the plans. They felt that the typically used bullet format outlined concepts that were too vague to be fully comprehended by most readers. While they had no empirical data to support the comprehension of narrative form over bullet form they were sufficiently satisfied with the results—that is to say the ability of members of the organization to implement the plan and follow through on the organization vision—that they have continued to use narrative form in their strategic planning processes. They believe it does a better job of setting the stage for the understanding of complex concepts and exposed potential conflicts that needed to be resolved (Shaw, et al., 1998).

Martin and Powers (1983) conducted an interesting experiment concerning the power of story to move people in an organization in a desired direction. They compared the persuasiveness of four different ways of convincing a group of Stanford business students that a particular company really practiced a policy of avoiding layoffs. The four ways used to convince the students were: (a) a story, (b) statistics (data which showed that the company had significantly less involuntary turnover than its competitors), (c) statistics plus a story, and (d) a straightforward policy statement made by an executive of the company. The students in the group which was given the story believed the claim about the policy more than any of the other groups, even the group that was given the statistics in addition to the story (Martin & Powers, 1983).

In his study of "management competencies," McKenna (1999) found that employees' stories had the potential to be personal enablers, and could compensate for the inadequacy that a formalized list of competencies presented in performance standards and performance appraisals. In his study of "management competencies" at a large multinational company and a public sector organization involved in city government he found that most sets of "management competencies" were developed without recognition of their inherent contradictions and without due regard for their contextuality. The case studies he collected and presented illustrated that it is a gross oversimplification to suggest that there are clearly identifiable and universal behavioral competencies that fit all situations. For example a performance competency such as "takes action to overcome obstacles" was in direct opposition to another competency "complies with behaviors and procedures." Another example, "demonstrates ability to act independently on own judgment," was in opposition to "respects and values the contributions of others." While McKenna was critical of the idea that competence could be developed in abstraction, divorced from experience, he also expressed skepticism of the notion that "managing by doing" inevitably leads to competence because such an approach ignores the situational factors that define competence in any given set of circumstances (McKenna, 1999).

Like Hansen and Kahnweiler (1993) in their study of story's impact upon the subcultures of executives and HR professionals, McKenna (1999) found that storytelling was a vehicle for conveying an organization's interpersonal norms and that stories allowed organizational actors to represent important and often hidden dynamics of an organization's way of being. He found that if an organization went to the trouble of identifying managerial competencies yet failed to recognize the obvious contradictions involved in their practice and interpretation at the micro-level, it was bound to create managerial and organizational incompetence and confusion (McKenna, 1999).

McKenna (1999) concluded that competence is not a fixed or finite state; rather "becoming competent" meant learning how to be competent in every new set of social interactions, and he suggested that story could help employees adapt to ever changing circumstances and situations. He suggested that individuals could construct stories that represent the specificities or micro-logics of situations in which they act or have acted, and that such reflection and storytelling could add value in the following ways: helping individuals make personal decisions about the appropriateness of their fit with the organization, raising questions about organization integrity as well as ethics and morality, allowing managers and others to challenge conventional wisdom constructively, developing the ability to reflect and enable better decisions to be made, creating a climate of empowerment, and finally, making inconsistency and incompetence discussable. McKenna concluded that managerial competency is not something that could be developed in isolation from its context and that trying to do so might be a waste of human resources dollars (McKenna, 1999).

In her study of the role narrative played in the case studies of three organizations she worked with (a ballet company, a semi-professional sports team, and a non profit group) Boyce (1995, 1996) found that not only did story function as a cultural code by helping people make sense of their world, it could also be used intentionally by organization members, managers and consultants to move the organization in a desired direction. She culled stories from her interviews with the members of the organizations and the documents the organizations produced. She analyzed the stories to identify themes and characteristics. She found five intentional uses of shared storytelling by organization members, managers and consultants that: (a) confirmed the shared experiences and shared meaning of organization members; (b) expressed the organization's experience of members or clients; (c) amended and altered the organization reality; (d) developed, sharpened and renewed the sense of purpose held by organization members; and (e) prepared a group for planning, implementing plans and decision making in line with shared purpose (Boyce, 1995, 1996).

Boyce (1996) suggested that stories told in organizations offered researchers a natural entry point to understanding and intervening in the cultures of an organization. But she also added a cautionary note that while leaders and members of an organization could be active culture creators and story could be a powerful proactive force within an organization, story could also be a force with a life and character of its own beyond the control of the founders and leaders of an organization—narrative could be a force difficult to tame (Boyce, 1996).

Boje (1991, 1995, 1998, 2001), perhaps the most prolific, most iconoclastic, and empirical researcher on the subject of narrative in organizations, spent hundreds of hours as a participant observer in companies such as Nike and Disney doing extensive research on the role of narrative. As a participant observer he sat in on meetings, recording stories as they arose. His findings largely supported the hypotheses that narrative helped people in organizations make sense of their world while reflecting the cultures of the organizations in which they were found. But, perhaps most significantly, Boje addressed the autopoetic and ontologizing role that stories, and story fragments, played in organizations (Boje, 1991, 1995, 1998, 2001; Boje, et al., 1982).

Boje (1991, 1995, 1998, 2001; Boje, et al., 1982) compiled hundreds of hours of audio and video recordings, supplementing recordings with field notes. He recorded conversations in diverse settings such as hallways and automobiles in order to capture spontaneous storytelling episodes. He interviewed executives, rank and file employees, customers and vendors. Data were collected in branch offices as well as headquarters. He examined official company histories as well as published texts assembled by other authors in order to compare official accounts with stories told by people outside of the organization. All recordings were transcribed and converted to transcripts. He entered the transcriptions into a computer database, edited them for accuracy, and line numbered them in order to keep track of the texts. After collecting and transcribing the narratives he sorted and analyzed them with the Readability Plus program. He deconstructed the stories, looking at how they changed over time and across accounts from different sources. He reinterpreted the narratives offering alternative interpretations. He sought out and documented the stories of those who were under represented or not represented at all by the official stories. In this way he was able to give voice to other sides of well-accepted stories. Through his analysis Boje uncovered how storytelling practices were sometimes used to subtly craft plots, develop characters and create rationales that covered up the reality of daily life in the organizations he studied (1991, 1995, 1998, 2001; Boje, et al., 1982).

Boje (2001) concluded that organizations are composed of fragmented, competing discourses that told a collective story. He found that stories were not necessarily highly agreed upon texts that were told from beginning to end. Rather, he found that the narratives within the organization were dynamic, varied by context, and were sometimes terse, requiring the hearer to silently fill in major portions of the story content and implications. The narratives Boje collected were often challenged, reinterpreted and revised by the hearers as they unfolded in conversations. The results supported a theory of organization as a collective storytelling system in which the performance of stories is a key part of members' sense making ability as well as a mediator for stasis or change. What emerged was a fresh perspective that challenged traditional narrative interpretation (Boje, 2001).

Adamson, Pine, Van Steenhoven and Kroupa (2006) demonstrated how story could play a dynamic, ontological role in organizations in their case study of San Juan Regional Medical Center. With a new CEO at the helm, management tried in numerous traditional ways to get the organization back on track. Management wrote and promulgated new vision and mission statements. They developed a new strategic plan. But they continued to lose money and lose their best employees. After nothing else seemed to work, management and employees of the Medical Center engaged in cocreating a story to tackle the medical center's problems (Adamson, et al., 2006).

Adamson, Pine, Van Steenhoven and Krupa (2006) adopted an Indiana Jones type theme, calling their story "Raiders of the Lost Art," and reflecting their focus on "the art" of providing the best possible health care and the best possible environment for both patients and employees. As the story developed, each time the Indiana Jones type character faced a new obstacle, volunteer teams composed of a cross-section of the organization stepped in to brainstorm solutions. Like Mitroff and Kilmann (1975), they found that it was often easier for members inside the organization to understand, identify and solve problems in a fictional setting and then transfer the solutions to the real world setting. The story approach energized employees as well as management. In fact, enthusiasm for the "Raiders of the Lost Art" story was so contagious that it spilled over into the local community, and for the first time in many years a bond issue was passed to raise much needed money for improvement of the Center (Adamson, et al., 2006).

Any recent review of the subject of narrative in organizations would be incomplete without mentioning the popular work of Denning (2001, 2005a, 2005b), if for no other reason than he has written prolifically on the subject and consulted with numerous organizations on the proactive use of narrative. While his work is not described in strictly empirical terms it is based on numerous examples of narrative from his personal experiences while employed at the World Bank, as well as work he subsequently did as an organization consultant. Denning (2001, 2005a, 2005b) could perhaps be described as an "action researcher" along the lines of Mitroff and Kilmann (1975), who were among the first to advocate the proactive use of narrative. He developed a "Storytelling Catalog" (Denning, 2004, p. 126) that lists categories of stories from his experience that could be used by organizations to achieve their aims, including stories that: "spark action, communicate who you are, transmit values, foster collaboration, tame the grapevine, share knowledge, or lead people into the future" (Denning, 2004, p. 127). Whether one agrees with Denning's interpretations or not, he can be credited for including practical examples of how to consciously employ stories to achieve desired aims. Denning's findings have been obviously stated on the covers of his book jackets; that is to say: stories are an often overlooked way of communicating complex ideas, organization members and especially leaders can use the art of storytelling to drive strategic change, and leaders who ignore the power and influence of story will likely suffer the consequences (Denning, 2001, 2004, 2005a, 2005b).

Organizational Story and Complexity Theory

Chapter II discussed how complexity science theory could be used to inform a study of narrative in organizations. A number of authors have used a narrative inquiry approach in their application of complexity principles to their studies of organizations. Those focused on here were Stacey (1996), Lewin and Regine (2001), and Bloch, Henderson and Stackman (Bloch, et al., 2007; Stackman, Henderson, & Bloch, 2006). Other authors have purposefully applied a combination of narrative theory and complexity theory to their studies of organizations; those focused on here were Baskin (2008), Boje (2001) and Chia (1998).

Stacey (1996, 2000) and Wheatley (2006), both management professors and organization consultants, have worked with numerous companies and have written extensively about the relevance of complexity theory to organization and management in a rapidly changing business and economic environment. Through their analysis they have both convincingly demonstrated and concluded that organizations must embrace chaos and unpredictability if they are to survive and prosper (Stacey, 1996, 2000; Wheatley, 2006).

Lewin and Regine (2001) applied complexity science principles to their case studies of both large and small businesses, emphasizing the importance of human relationships and the need for creative adaptability in today's rapidly changing world. Their case studies of organizations were presented as narratives, because "Narratives, we feel, can capture the intangible, non-measurable, temporal reality that is often overlooked in analytic writings about organizations" (Lewin & Regine, 2001, p. 63).

Bloch, Henderson and Stackman (2007) drew out the narratives of several organizations as the groups they studied emerged and adapted in response to their dynamic environments. They distilled a list of complexity principles culled from a variety of authors who have studied complexity science and applied them to the organizations their analysis of several organizations in the belief that "complexity science provides a means to understand organizational life, a means that is not available through more traditional, reductionist points of view" (Bloch, et al., 2007, p. 199).

While Bloch, Henderson and Stackman (2007) did not directly draw a connection between narrative theory and complexity theory, they did use the narratives they collected from the people in the organizations they studied to support the notion that organizations functioned like complex adaptive entities. They found that through the application of complexity principles to organization studies they were able to uncover patterns that helped them better understand how those entities sustained themselves (Bloch, et al., 2007; Stackman, et al., 2006).

Chia (1998) examined the fundamental differences between social and natural systems and challenged the notion that complexity science could be used to better understand organizations. However he did suggest that a "complexity thinking" (p. 341) model inspired by philosophy, literature, art and the humanities might be more "adequate to the task of revealing to us the whole spectrum of human lived experiences" (p. 341).

Chia (1998) discussed the distinction, adopted from Tsoukas (1998), between "propositional knowledge" and "narrative knowledge." He explained that "Propositional knowledge is knowledge involving the formulation of conditional 'if, then' statements relating to an observed set of empirical conditions. Narrative knowledge on the other hand is knowledge organized and expressed through stories, anecdotes and examples" (p. 344). Chia suggested that quantitative studies with propositional knowledge underpinnings are well suited to the study of a wide range of phenomenon but often fail to tell the whole story when applied to social science research. And while a qualitative and by inference narrative knowledge—approach may feel too unstructured and open to interpretation to be meaningful to those who desire definitive answers, the benefit lies in narrative knowledge's ability to sensitize people to the stories that have informed their view of the world, and perhaps sensitize them to the vastly different view of others (Chia, 1998). The research and theories of Baskin (2008) and Boje (2001) were discussed in detail earlier in this paper, so their findings will not be discussed in detail here; but each found that traditional narrative theory was not adequate to the task of explaining how and why story functions the way it does in organizations. And each of them found that a combination of narrative theory and complexity theory provided unique insights into how organizations work (Baskin, 2008; Boje, 2001).

The Dark Side of Story

Up to this point in the discussion of the literature, story has been portrayed as a potentially powerful, mostly positive force that, albeit difficult to tame, has been largely underutilized. It would be erroneous to conclude from a survey of the research that story is either a benign force in organizations or the panacea for all organization ills. Any discussion of story in organizations would be incomplete without addressing the potentially destructive power of story and the practical aspects of trying to apply it. Several authors have suggested that stories can function as a negative and controlling force in organizations—thus bringing up the ethical implications of attempting to consciously employ story to accomplish organizational aims.

Boje (1982) asserted that "war stories" could be used by both client and consultant to legitimize the continuance of techniques that worked well in the past, and to target the scope and direction of interventions. He has suggested that stories could mobilize support and provide protection against threatening groups. But he has also cautioned that stories can have a momentum of their own, and that, once launched, are subject to interpretation that can vary widely. Boje, Fedor and Rowland (1982) cautioned that myths could be used by the dominant coalition in an organization to camouflage its power, make decisions in secret, and hide the results of those decisions. He also suggested that myths are inexorably intertwined in an organization's power structure.

As part of a larger research project on organization innovation and change, in a case study of an electronics company in the early 1980s, Feldman (1990) addressed the cultural role of narrative, as well as its ontological role. Feldman spent several years, off and on, as a participant observer within the electronics company, interviewing employees and observing field operations. He collected biographic information such as personal histories and career data. He observed meetings, presentations, informal gatherings, lunches and parties. He produced 700 pages of transcriptions and notes, and collected 300 pages of company documents. He categorized the data he collected according to characteristics that seemed important to employees. He chose to focus on the creative role stories played in the organization. He found that stories were created by organization members in response to the problems and changes the company was facing, and he found that stories—for better or worse—were a pivotal influence in the direction the company took in response to problems. He found that as a form of cultural creativity, stories could be used to mediate conflicts and contradictions that arose from changing circumstances, but he also found that stories could have a negative influence on the process of organizational change (Feldman, 1990).

Feldman (1990) described a particularly poignant "scapegoat" story to illustrate his contention that stories can be used to mediate conflicts and contradictions that arise from changing circumstances. Faced with problems that would have been disastrous for the company—and fearing change—members of the organization latched upon a "scapegoat" as the source of the problems and created a story suggesting that with the elimination of the scapegoat the organization would be able to make the structural changes it needed to make to move in the direction it needed to go. Indeed, once the scapegoat had been created and eliminated the company was able to move forward. Feldman concluded that cultural creativity was needed to survive and move on at the liminal stage in the organization's development; and that by creating a story—in this case the story of a scapegoat—the organization was able to adapt to the necessary changes. Feldman proposed that while not totally fabricated—like propaganda—stories could be used for social and political control. Feldman found that stories were a release valve from the pressure of discomforting situations that could not be handled directly. He concluded that stories could identify major threats to the organization and could be used to attack, or protect, any individual inside or outside of the organization (Feldman, 1990).

In his seminal work with prisoners of war being repatriated after the Korean War in the early 1950s, Schein (1990, 2006; Schein & Barker, 1961; Schein & Bennis, 1965) was one of the first researchers to legitimize the analysis of narratives to better understand group culture, group norms and the coercive power of narrative in general. Schein (1990, 2006) recognized that once people make sense of their world collectively, creating norms and developing assumptions, those norms and assumptions define reality, the individual's identity and group membership.

Schein (2006; Schein & Barker, 1961; Schein & Bennis, 1965) who served on active duty in the Army while completing the requirements for his doctorate degree in psychology, was called upon to be part of a psychiatric team deployed to work with prisoners of war who were in the process of being repatriated. While waiting in Inchon, Korea, for the rest of the assigned psychiatric team to arrive, Schein decided to randomly pull repatriates off the processing line and interview them about their prison experiences. He simply asked each repatriate to tell their story from the moment of capture. Up to that point his focus had been on experimentation and quantitative psychological assessment; but listening to the stories of repatriates forever changed his approach toward data collection and was the beginning of his great body of work on culture theory. Schein found that the stories of the repatriate fell into clear patterns that resulted in his being able to define in general terms what the Chinese indoctrination program consisted of and why it worked on some people and not others (Schein, 2006; Schein & Barker, 1961; Schein & Bennis, 1965).

Summary of the Literature Review

A review of the literature suggested that while the collection of empirical research on the role of story in organizations was not vast, there has been enough significant research to date to suggest that stories performed powerful sense making and sense giving functions in organizations, thereby enabling people to make sense of the past. A review of the literature also suggested that as people used story to make sense of what has happened in the past they entered into a process of creating an individual and collective view of reality. The view of reality created—whether collective or individual—was reflective of culture and resulted in the development of cultural code that not only helped people adapt to their environment and therefore cope with the present, but also served as a guide for future actions.

In addition, a review of the literature suggested that stories in organizations have an ontological and autopoetic quality—not unlike living organisms—that enhances their ability to help people make sense of the past, cope with the present, and navigate into the future. The literature suggested that as stories moved through organizations they often morphed and changed—sometimes subtly and sometimes dramatically—adapting to changing situations. Sometimes stories seemed to die out but they re-emerged at a later date. This ontological quality of story was reflective of a complexity view that compared social constructs such as stories to naturally occurring systems and has resulted in new and unique insights into how story, organizations—and the people in them—work.

Ultimately, the literature review supported the purpose of this study by suggesting that the stories told by people in the Navy were worth studying. The review suggested that while there has never been a focused study of story in the Navy, it is likely—based on empirical studies of other organizations—that story plays a significant role in the Navy and, therefore, is worth exploring.

This study was unique in that it was the first systematic study of organizational stories in the Navy. It was also unique in that it developed an analysis of stories using a unique combination of research questions with theoretical underpinnings in both narrative theory and complexity theory. While other studies have addressed single, and even multiple, functions of story in organizations—such as the sense making, or how stories contribute to the creation of organizational culture—no other study has approached the subject in the way this study did. That is to say, no other study has focused on the ability of story to help people in organizations: (a) make sense of the past; (b) cope with the present; and (c) navigate into the future, with an overarching interest in the ontological properties of story that seem to inform how story functions within organizations.

Since humans are the only living creatures that tell stories, could it be—as Baskin has suggested—that our ability to tell stories is the single most important factor that has

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enabled us to adapt and prosper as a species? Through the analysis of the stories of one group of individuals in one organization, and through a unique application of research questions and theories, this study supported the growing body of work that seems to support the notion that indeed our ability to tell stories is what differentiates us from other living organisms and has enabled us to survive and prosper as a species.

CHAPTER III

METHODOLOGY

Restatement of Purpose

It was the purpose of this study to explore what narrative, in the form of stories, revealed about Chief Petty Officers in the United States Navy, including how Chief Petty Officers use stories to: (a) make sense of the past, (b) cope with the present, and (c) navigate into the future. This study also (d) examined the stories the Chief Petty Officers told through the lens of complexity theory in an attempt to uncover how and why stories seem to function the way they do within the organizations in which they are told.

Research Design

This was a qualitative study designed to collect and analyze stories utilizing two different methods from two different research sites. The methods used were: (a) semistructured interviews that were designed to evoke stories and explore their meaning, and (b) participant observations to observe, note and analyze stories that emerged in the field. Stories, narratives and parts of narratives were collected, analyzed and interpreted to provide a deeper, richer understanding of the functions that stories perform in the lives of the individuals who tell them—and hear them—and how the stories perform those functions. A combination of theories—narrative theory and complexity theory—was used to frame this study. Data were collected in two phases at two different sites: (a) a Navy leadership academy, and (b) onboard a Navy ship at sea.

Phase One of the Research Design: the Leadership Academy

In the first phase of the study the researcher visited a military leadership academy that trains senior enlisted members who are in middle management and other positions of leadership within the Navy. The researcher spent five days at the Academy: (a) observing the use of story inside and outside of the classroom; (b) collecting stories from semistructured interviews; and (c) exploring, with the story tellers and their audiences, the possible meanings and uses of the stories told.

Initial contact with the directors of the Academy was made through phone calls, e-mail and letter correspondence. Appendix B includes correspondence with the Academy. In phone meetings with the Academy directors the purpose of the research and the methodology was outlined. The directors were provided with a sample introduction memo (Appendix C). The researcher was introduced to the Academy's staff and students at a general meeting of the group in the auditorium on her first day at the site. Most of the first day on site at the Academy was spent sitting in on classes to observe and record the use of story in the classroom. A "war game" and a physical training test were scheduled on the second day at the Academy, which restricted observation opportunities. Semistructured group and individual interviews were conducted on the third and fourth days at the Academy. An additional half-day was spent at the Academy debriefing the directors and completing administrative paperwork (Appendixes D and E).

Phase Two of the Research Design: The Ship

The second phase of the study was comprised of observations and interviews conducted for a period of seven days onboard a Navy ship—an aircraft carrier—operating at sea. The researcher initiated contact with the Ship through phone, letter and e-mail correspondence. Appendix F includes correspondence to and from the Ship. The Ship's Executive Officer (second in command) tentatively agreed to the project over the phone but asked the researcher to follow up with an e-mail to the staff of the admiral who oversees aircraft carrier operations. Once the admiral's staff approved the request, the Executive Officer assigned the Ship's Public Affairs Officer to work out the details of the project with the researcher. The researcher supplied the Ship with a sample memo (Appendix G) to use as an introduction to the target population.

The Research Sites and Participants Participants and Sample: Navy Chief Petty Officers

The research focused on the stories of Navy Chief Petty Officers. Chief Petty Officers are career enlisted men and women, non-commissioned officers, with a minimum of eight years active duty experience, who have risen through the ranks to fill middle management and leadership positions in the Navy. Enlisted members are promoted to the rank of Chief Petty Officer as a result of their competence in a technical specialty, and their demonstrated leadership ability. A Chief Petty Officer's primary job is to supervise and train young enlisted members—petty officers and sailors—in a particular technical specialty so that they can perform the operational tasks of a warship at sea. As a result of their maturity and experience, Chief Petty Officers often find themselves in the role of training young commissioned officers, as well as young sailors, even though commissioned officers are formally their superiors in the chain of command.

The researcher chose to focus on the stories of Chief Petty Officers because, in her opinion, developed from 20 years in the Navy, Chief Petty Officers are excellent storytellers who use story in a wide variety of contexts. Individuals selected for chief are subjected to an intense initiation period through which they are indoctrinated, trained and tested by their fellow Chief Petty Officers before they are accepted into the ranks of the "Chiefs' Mess." The Chiefs' Mess is the physical location onboard a ship where the Chief Petty Officers eat their meals, hold meetings and relax, but it is also a strong, fraternal organization that reaches across the entire middle management stratum of the Navy. The term Chiefs' Mess has come to represent that fraternal organization over time.

The Navy is an organization of relatively young people with an average age of 19 years (CNO, 2007). Navy members either make rank and advance in pay grade or they are asked to leave. An enlisted person who has achieved the rank of Master Chief Petty Officer may stay in the Navy for 30 years—a few Master Chief Petty officers remain on active duty longer than 30 years but they are the exception.

All of the participants in this study were Chief Petty Officers, Senior Chief Petty Officers or Master Chief Petty Officers—Master Chief Petty Officer is the highest possible enlisted rank. All of the participants in this study had between 9 and 30 years of service in the military at the time of the data collection. The participants had a variety of technical specialties. There were both male and female participants, and a variety of ethnic backgrounds were represented.

Prior to conducting interviews and observations, each participant was given a personalized copy of the Informed Consent letters (Appendixes D and E). Participants were reminded that their participation was voluntary and that they could stop participating at any time. The confidential nature of the data collection and reporting process was explained, such as the use of pseudonyms in any written reports and the secure storage of the data. Great care was taken to ensure that participants in this study had a clear understanding regarding the type of what information that was being sought and how it would be used. The University of San Francisco Institutional Review Board for the Protection of Human Subjects approved this research design on September 7, 2007 (Appendix H). Data collection commenced in October, 2007 and was completed by March 1, 2008.

The Leadership Academy

The Leadership Academy is a six-week program designed to develop the leadership ability of Chief Petty Officers in the Navy. There are approximately 65 students enrolled in each class. The class is divided into small study groups to allow for sharing of experiences and ideas. Students must apply and be accepted into the program. Priority is given to those who are transferring into positions of expanded leadership and management responsibilities in the Navy. Some senior enlisted members of the other branches of the United States Military—and a few senior enlisted members of allied countries—are enrolled in each class. The course is taught primarily by Master Chief Petty Officers who have been recognized for their exceptional leadership ability, and chosen through a highly selective process to be instructors and directors at the Academy. All students live on site; they engage in physical training and team building exercises as well as academic training during their period of enrollment.

All but one of the 14 participants at the Academy was male. They represented a variety of technical specialties. Most of the participants at the Academy were Caucasian but there was one African American participant and one Hispanic participant. Three of the participants were instructors or directors at the Academy. Table 2 outlines the composition of the participants at the Academy.

Rank, Pseudonym	Gender	Ethnicity	Technical Specialty
1) Senior Chief Dee	Female	Caucasian	Logistics
2) Master Chief Mike	Male	Caucasian	Construction
3) Master Chief Hassan	Male	African American	Sonar
4) Senior Chief Brian	Male	Caucasian	Operations
5) Senior Chief Carl	Male	Caucasian	Communications
6) Master Chief Jeff	Male	Caucasian	Weapons
7) Master Chief Eric	Male	Caucasian	Electrical
8) Chief Jordan	Male	Hispanic	Engineering
9) Senior Chief Shane	Male	Caucasian	Engineering
10) Senior Chief Dave	Male	Caucasian	Aviation
11) Senior Chief John	Male	Caucasian	Sonar
12) Senior Chief Tracy	Male	Caucasian	Aviation
13) Master Chief Tom	Male	Caucasian	Personnel
14) Senior Chief Bob	Male	Caucasian	Sonar

Table 2Leadership Academy Participants

The Ship

An aircraft carrier is a warship with the primary mission of launching and recovering aircraft. Aircraft carriers are often aptly described as "floating cities" replete with all the operational and functional components of a city where people must work and live. There are approximately 100 aircraft on board the Ship along with all the ancillary services it takes to support them, including weapons systems for defense of the Ship and its aircraft. The flight deck is approximately as long as three football fields and covers 4.5 acres. Most aircraft carriers, such as the one in this study, are nuclear powered so they can conceivably remain at sea without refueling for months—or even years. However the aircraft, and the vehicles used to move them and other equipment around the Ship, are all powered by jet fuel that must be replenished at regular intervals. The Ship is alive with activity around the clock. When the Ship is at sea the crew routinely works in 12-hour shifts—12 hours on and 12 hours off. There are television lounges where crewmembers

can watch movies or television programs 24 hours a day. There are gyms, a library, a chapel, 24 hour a day food service, laundries, and even an internet café. Five thousand to 6,000 people live and work on an aircraft carrier when it is at sea. Approximately 150 of them are Chief Petty Officers. The average crewmember's age is 19 (Chief of Naval Operations, 2007).

Approximately one fifth of the crew is female. Women have only recently within the past ten years—been assigned as crewmembers on aircraft carriers. Prior to that time legislation prohibited women from serving on warships. The numbers of women serving at sea has gradually increased since the legislation was changed.

To an outsider, the activities on the flight deck of an aircraft carrier during flight operations might appear chaotic. There are jets slamming into the deck and blasting off, cables whirring, wind blowing, jet engines revving up and down, small tractors crisscrossing the deck with large aircraft in tow, and people scurrying about everywhere talking into radios and waving hand signals at one another. The noise level is so high that everyone working on deck is required to wear ear protection, and no one goes on deck during flight operations who is not supposed to be there. But Senior Chief Tim, the chief in charge of moving the aircraft around the flight deck and to the hangar bay below, described flight deck operations as "a carefully choreographed ballet." Every other department on the aircraft carrier is focused on supporting flight deck operations—the primary mission of the Ship.

The researcher was initially assigned to the Air Department on the Ship because the Executive Officer and Public Affairs Officer assumed the researcher would be most interested in flight deck operations, since that is the main function of the carrier and the function that Rochlin, LaPorte and Roberts (1987) had studied. Master Chief Cal was assigned as the researcher's initial sponsor, but after the researcher explained the purpose of the study to Master Chief Cal he suggested that she interview and shadow Chief Petty Officers from other departments on the Ship as well. Master Chief Cal broached the subject at an all Chief Petty Officers meeting onboard the Ship, and the Chief Petty Officers agreed to open participation in the study to the Chiefs' Mess at large. The chiefs who wanted to participate were asked to approach the researcher at meal times to volunteer for the study. As the only person not in uniform in the Chiefs' Mess the researcher was easy to spot, and soon had more volunteers than she could effectively observe and interview in her week on board the Ship.

Since the researcher spent most of her time with the Air Department, most of the study participants were Aviation Boatswain mates who worked in the Air Department on the Ship. Aviation Boatswain mates are responsible for the work that takes place on the flight deck of the aircraft carrier, such as: directing aircraft movements once they have landed, fire fighting and damage control on deck, fueling of aircraft, maintenance and operation of the steam catapults that launch aircraft, maintenance of the arresting gear that catches the planes when they land, maintenance of the flight deck itself, towing and parking aircraft in the hanger bay, and all other on deck duties that relate to the launching and recovery of aircraft.

All but three of the 20 participants on the Ship were male. Eleven were Caucasian, four were African American, four were Hispanic, and one was Asian. Five were Master Chief Petty Officers (E-9s, the highest enlisted rate possible), eight were Senior Chief Petty Officers (E-8s) and seven were Chief Petty Officers (E-7s). Table 3 lists the participants on the Ship. Due to the Navy's requirement for "time in grade" before being considered for promotion, the Master Chief Petty Officers were the oldest group with the most time in the Navy, The Senior Chief Petty Officers were the second eldest group, and the Chief Petty Officers were the youngest group with the least amount of time in the Navy.

Rank, Pseudonym	Gender	Ethnicity	Technical Specialty
1) Master Chief Cal	Male	African American	Aviation Boatswain
2) Chief Saul	Male	Hispanic	Aviation Boatswain
3) Senior Chief Tim	Male	Caucasian	Aviation Boatswain
4) Chief Sara	Female	Caucasian	Hospital Corps
5) Senior Chief Evers	Male	African American	Aviation Boatswain
6) Senior Chief Sam	Male	African American	Aviation Boatswain
7) Chief Bryant	Male	Caucasian	Aviation Boatswain
8) Senior Chief Vela	Male	Hispanic	Aviation Boatswain
9) Senior Chief Jerry	Male	Caucasian	Communications
10) Senior Chief Jeffers	Male	African American	Aviation Boatswain
11) Chief Brent	Male	Caucasian	Aviation Boatswain
12) Chief Rolf	Male	Caucasian	Boatswain
13) Master Chief Arcelo	Male	Asian	Mechanical Repairs
14) Senior Chief Pay	Male	Hispanic	Boatswain
15) Master Chief Joe	Male	Caucasian	Engineering
16) Master Chief Ray	Male	Caucasian	Administration
17) Master Chief Quin	Female	Caucasian	Personnel
18) Chief Cord	Male	Hispanic	Aviation Control
19) Senior Chief Tray	Male	Caucasian	Aviation Boatswain
20) Senior Chief Tully	Male	Caucasian	Aviation Logistics

Table 3 Ship Participants

Difference in the Roles of Chief Petty Officers at Each Site

There were significant differences in the roles of the Chief Petty Officers at the two sites. The Chief Petty Officers at the Academy were engaged in classroom training and some physical training. Most of the students at the Academy were between duty stations—that is to say they were transferring from one organization to another and

usually one geographical location to another. Their time at the Academy was relaxed, and relatively low pressured, as compared to their time in operational commands.

At the Academy the Chief Petty Officers were in the role of students, removed from their typical role of supervising and training young sailors in an intense operational environment. The students at the Academy typically had classes, or engaged in exercises, from 8:00 AM to 4:00 PM daily, with weekends off and some three-day weekends. While they did have some reading assignments and graded written homework, they were attending the Academy on a pass/fail basis, and they were not competing with each other for class standing or promotion. Their time at the Academy provided them with the opportunity to reflect upon past experiences in view of the leadership training they were receiving, and to dialogue with other Chief Petty Officers and senior enlisted members from other services, in a relaxed, low pressure, atmosphere.

In contrast, the Chief Petty Officers on the Ship were working in an intense operational environment. All of them were in supervisory roles and all were responsible for expensive equipment, as well as people, 24 hours a day, seven days a week in an industrial environment. While not directly competing with one another for promotion their performance was being evaluated and graded and would factor into their promotions within their technical specialties. The Chief Petty Officers on the Ship were constantly dealing with the personal and professional problems of their subordinates in addition to the technical challenges of their jobs. They were engaged in, and balancing, the workload typical of middle managers including: training, supervising, administration, counseling, problem solving, attending meetings and standing watches.

Instrumentation

Observations, semi-structured group interviews and individual interviews were the instruments used in this study. Interviews were audio recorded whenever possible. Hand written field notes were taken during all observations and interviews. Field notes were augmented with audio memos.

Phase One Instrumentation: The Leadership Academy

The Interview Protocol and Script (Appendix I) was used as an introduction to the individuals or groups being interviewed. The purpose of the interview was explained, allowing for participant questions and clarification as needed. At the risk of biasing the outcomes, the researcher had several questions and examples of stories that could be used if necessary to prompt discussion or evoke stories. Fortunately the discussion flowed easily and she rarely needed to use examples of stories from her own experience to prompt discussion or evoke stories.

Phase Two Instrumentation: The Ship

Observations and interviews onboard the Ship were conducted using Shadowing and Interview Protocols (Appendixes I and J). Each shadowing and interview session commenced with an explanation of the purpose of the study, using Appendix I, with time allotted to discuss any questions or concerns that the interviewee might have. After discussing the purpose of the study, participants were asked the five questions listed in Appendix J (Shadowing, Observation and Interview Protocol). The questions were: (a) Tell me your story—how did you get where you are today? (b) What challenges do you face in the course of your work? (c) What do you think this organization does well? d) How do you use story, if at all, in the course of your day? and (e) Is there anything else you would like to talk about or add? Participants were not restricted to the five questions listed above. Field notes were taken during observations and interviews, and augmented with audio memos at the end of each day.

Data Collection

Data were collected continuously through observations and semi-structured interviews at the Academy and on the Ship. The researcher carried her notebook and audio recorder at all times. Interviews were audio recorded whenever possible, field notes were taken at all times and augmented with audio memos at the end of each day. The researcher started to transcribe audio recordings and observations on the first day of observations at the Academy and continued to document thoughts throughout the analysis process, resulting in over 300 single-spaced pages of transcriptions and memos and preliminary analysis. All data were held in secure electronic storage on the researcher's personal computer, protected by passwords, or held in a secure filing cabinet in the researcher's private office at her residence. Pseudonyms were used in all written reports of findings.

Data Collection: The Leadership Academy

Two individual interviews and four group interviews were conducted at the Academy using the instruments described above. A sign-up sheet was posted on the door of the office the researcher was using, and volunteers were asked to sign up on class breaks or after hours for one of the interview sessions if they wanted to participate. The 14 individuals listed in Table 2 volunteered for the study. The semi-structured group interviews at the Academy were one to two hours in length and all were audio recorded. Field notes were also taken during interviews and classroom observations. The researcher herself transcribed all voice data from the audio recordings. Memos and transcriptions were organized by date. On the fifth day at the Academy the researcher debriefed the directors and completed administrative requirements, such as: (a) verifying names and demographic data, and (b) ensuring that all privacy data was properly completed. *Data Collection: The Ship*

The 20 individuals listed in Table 3 volunteered for shadowing and interview sessions on board the Ship. A shadowing session on board the Ship typically started with a short interview conducted in the Chiefs' Mess using Appendixes I and J (Introduction to Interviews and Observation Protocols) as a guide, followed by a tour of the area in which the participant worked and observations of the participant in the course of their workday. The researcher took notes during interviews and observations, augmenting handwritten notes with audio recorded notes and observations. At times there were opportunities to talk with others in the workplace, such as subordinates, to capture their interpretations of conversations that had taken place. Each shadowing and individual interview session lasted one to four hours. Group interviews—more aptly described as informal discussions rather than interviews—usually took place over meals with groups in the Chiefs' Mess or in other casual settings. Stories, or parts of stories, that emerged during observations were recorded in written memo format with as much detail as possible.

Data Analysis

Throughout the study, a continuous process of collecting, analyzing and coding the data was used. Stories were the "unit for analysis" (Gabriel, 2000, p. 140). The researcher transcribed the audio recordings and wrote reflective memos as she transcribed. She then read through the transcriptions and memos several times, bracketing each story, highlighting key words and phrases, and making notes in the margins of the transcripts. She used the protocol outlined in Appendix K to give each story a title, and completed a preliminary analysis identifying story modes and other outstanding characteristics. She then used Appendixes K and L to note key words in the applicable columns if the story seemed to contribute to sense making, coping or navigating into the future. She used Appendixes K and L to note through key words complexity principles that were present in the story or the dialogue that accompanied it. The researcher also used Appendix K to create a master story list (Appendix M). From Appendixes K, L and M the researcher was able to create several working documents in an Excel spreadsheet form that helped to tabulate the frequencies of: poetic modes, key words and themes that contributed to the sense making, and the coping and navigating properties of the stories. Through this process dominant narratives started to emerge. Appendix N is an overview of the dominant narratives and the stories that contained evidence of the dominant narratives.

Validity and Reliability

The validity and reliability of the findings were enhanced by using separate methods for data collection (observations and interviews) collected from geographically separate locations but from a similar population (Navy Chief Petty Officers). Triangulation in the research process was accomplished by gathering data from more than one source and more than one research site, while utilizing several methods to analyze the data. Data was compared across different contexts and perspectives. The researcher worked toward interpretive validity by looking for evidence within the data that confirmed or disconfirmed emerging themes and findings.

Role of the Researcher

The researcher was a participant observer in this study (Patton, 2002). In choosing to pursue this inquiry the researcher chose to study an organization that, as a retired Navy Commander, she was familiar with. The researcher hoped that her familiarity with the Navy would yield a richer understanding of the culture than that of a researcher who had not experienced the Navy first hand. However, the researcher took great care to be cognizant of her biases as she interpreted the data, using the protocols described earlier to keep her analysis focused and biases in check; that being said, there is no way to avoid subjective interpretation of the data. The researcher assumed the stance described by Gabriel (2001) as that of a "fellow traveler" (p. 136); that is to say she fully engaged with the stories and storytellers, but she tried to remain aware of her biases and let the stories and the storytellers speak for themselves.

The researcher retired from the Navy in 1995 as a Commander after 21 years of active service. She was stationed in a wide variety of operational, line and staff positions around the world throughout her career in the Navy. She holds a Masters degree in Organizational Development from the Navy Post Graduate School in Monterey, California. The researcher conducted the Navy's first study of sexual harassment in 1979 for her master's thesis. She wrote the Navy's first policy on sexual harassment, and developed the Navy's first workshops to identify and prevent sexual harassment. The researcher's sexual harassment research heightened her interest and awareness in how the Navy has changed in response to the increased role of women in Navy over the past 35 years. The researcher was awarded a second Masters degree in Strategy and Planning in 1989 from the Naval War College in Newport, Rhode Island—training that has heightened her interest in planning for the future and how to successfully facilitate organizational change.

The researcher was trained in small group psychotherapy for her assignment as the director of a forty-bed substance abuse treatment facility in the Philippines at the end of the Vietnam War. This training, and her work with sailors and marines who had serious substance abuse problems, increased her interest in oral narratives, enhanced her ability to draw out the narratives of participants, and helped her to be cognizant of group processes as well as narrative content. The researcher holds a certificate in Cross Cultural Communication from Georgetown University, which heightened her awareness of the impact that culture has on narratives, especially with respect to gender, race and ethnicity.

The Navy has changed a great deal since the researcher retired. When she joined the Navy women were not yet being assigned to sea duty. The researcher was never permanently assigned to sea duty, and never spent more than a day at sea on a warship prior to collecting the data for this study. Therefore, it was exciting for the researcher to spend a week on an aircraft carrier at sea. No doubt her positive experience biased her impressions. Someone permanently assigned to sea duty, or someone involuntarily assigned to sea duty, would likely paint a different picture of the environment. Therefore the researcher tried to stick to factual descriptions of the people and the environment, and she checked those descriptions with others on the Ship as well as other active duty and retired Navy members. The researcher's training and work as an organizational development consultant after retiring from the Navy, and her work as a newspaper reporter prior to joining the Navy, helped her to be aware of her need to be as objective as possible and aware of her biases as she interpreted the data.

CHAPTER IV

FINDINGS

Overview

Thirty-four Navy Chief Petty Officers participated in this study, 14 at the Academy and 20 on the Ship. Although there were times on the Ship when it was impossible to carry on a conversation due to the intense operations tempo, there were other times when the participants were able to engage in conversation and storytelling. One hundred and twenty nine stories were culled from observations and interviews, and analyzed. A list of the stories that includes story titles, poetic modes and storytellers is included in Appendix M. It was apparent early on in the analysis that the participants in this study used story to:

1. Make sense and give sense. There was evidence that the participants use stories to help interpret reality and give life meaning. They told stories that reflected commonly held values and principles.

2. Cope. The participants used story to cope in a multitude of ways. They told stories that were cathartic, enjoyable and entertaining. They told stories that added levity to the workday and created bonds with others. They told stories to reduce stress, or add to stress, by enabling others to vicariously experience situations they might not otherwise experience.

3. Navigate into the future. The participants created frames of reference through story that they used to set a course into the future and they told stories to others in the organization to help them do the same. Although it was apparent early on in the data analysis that the participants used stories to make sense, cope, and navigate into the future, it was impossible to group the stories by those functions. Most of the stories collected served multiple functions at different times for the people who told them and heard them. Therefore, the fourth research question regarding the how and why of stories, and the application of complexity theory to the data, resulted in a more insightful line of inquiry. Once the Chief Petty Officers were viewed as a storied space using Baskin's (2008) combination of narrative and complexity theories, dominant narratives started to emerge from the stories, and the ways that the storied space of the Chief Petty Officers Mess functioned like a complex adaptive entity began to unfold.

Although there were more participants on the Ship than at the Academy, 20 participants on the Ship as compared to 14 participants at the Academy, the participants at the Academy told more stories than the participants on the Ship, 66 stories as compared to 63 stories. This finding was to be expected. As discussed in Chapter III, the participants at the Academy were in a more relaxed environment that was more conducive to sharing stories. It was found that stories flowed more readily in a group interview setting, with one story often prompting several others on the same subject or a connected subject.

Story Modes and Frequencies

Gabriel's (2000) narrative theory was useful in the first phase of the analysis as a way to organize the stories and begin to peel back the layers of meaning. Most of the stories analyzed fell into specific poetic modes identified by Gabriel (2000), such as epics, comedies, tragedies and romances. Classifying stories into poetic modes, and identifying other characteristics, using Table 1 and Appendix K, gave some much needed structure to the data analysis, and allowed themes to begin to emerge.

Tables 4, 5 and 6 illustrate the frequency of poetic modes in the stories collected, by sites and participants. Table 4 is an overview of the frequency of poetic modes by site. Table 4 shows that roughly the same number of stories were collected at both sites and epic stories, or stories with strongly epic elements, were the most prevalent type of story collected at both sites, followed by stories with strongly comic elements. Tragic and romantic stories were told with the lowest frequency.

Tables 5 and 6 present a more detailed overview of poetic modes tabulated by site as well as participants. For example, female participants told more romantic stories than male participants, and more tragic stories were told on the Ship than at the Academy. While there were more participants on the Ship than at the Academy, more stories were recorded at the Academy perhaps because group interviews were used to elicit stories at the Academy while stories were collected from shadowing and individual interviews on the Ship.

Story Poetic Mode	Ship	Academy	Total
Epic	23	21	44
Comic	6	6	12
Tragic	12	5	17
Romantic	4	5	9
Comic-Epic	5	6	11
Tragic-Comic	4	8	12
Epic-Comic	2	7	9
Romantic-Comic	1	6	7
Romantic-Epic	6	2	8
Total Stories	63	66	129

Table 4 Frequency of Story Poetic Modes (PM)

Rank, Pseudonym (Ethnicity, gender)	Stories Told (total)	Epic	Comic	Tragic	Romantic	Comic- Epic	Tragic- Comic	Epic- Comic	Romantic- Comic	Romantio -Epic
Senior Chief Dee (Caucasian, female)	10	1	0	0	5	0	0	1	2	1
Master Chief Mike (Caucasian, male)	4	2	0	0	0	0	1	1	0	0
Master Chief Hassan (African American, male)	8	1	1	1	0	2	2	1	0	0
Senior Chief Brian (Caucasian, male)	5	3	0	0	0	0	0	1	0	1
Master Chief Carl (Caucasian, male)	5	2	1	0	0	0	2	0	0	0
Master Chief Jeff (Caucasian, male)	6	2	0	2	0	0	0	2	0	0
Master Chief Eric (Caucasian, male)	4	2	1	0	0	0	1	0	0	0
Chief Jordan (Hispanic, male)	3	0	0	1	0	0	1	0	1	0
Senior Chief Shane (Caucasian, male)	3	1	0	1	0	0	0	0	1	0
Senior Chief Dave (Caucasian, male)	4	0	1	0	0	3	0	0	0	0

 Table 5

 Poetic Modes (PM) of Stories Told by Leadership Academy Participants

continued on next page

Rank, Pseudonym (Ethnicity,	Stories Told (total)	Epic	Comic	Tragic	Romantic	Comic- Epic	Tragic- Comic	Epic- Comic	Romantic- Comic	Romantic -Epic
gender) Senior Chief John (Caucasian, male)	6	3	1	0	0	1	0	1	0	0
Senior Chief Tracy (Caucasian, male)	2	2	0	0	0	0	0	0	0	0
Master Chief Tom (Caucasian, male)	5	1	1	0	0	0	1	0	2	0
Senior Chief Bob (Caucasian, male)	1	1	0	0	0	0	0	0	0	0
Poetic Mode Totals	66	21	6	5	5	6	8	7	6	2

Table 5, continued

Rank, Pseudonym (Ethnicity, gender)	Stories Told (total)	Epic	Comic	Tragic	Roma- ntic	Comic- Epic	Tragic - Comic	Epic- Comic	Roman tic- Comic	Roman tic -Epic
Master Chief Cal (African American, male)	3	1	0	0	0	1	1	0	0	0
Chief Saul (Hispanic, male)	1	1	0	0	0	0	0	0	0	0
Senior Chief Tim (Caucasian, male)	7	1	1	1	1	1	2	0	0	0
Chief Sara (Caucasian, female)	3	0	0	0	2	0	1	0	0	0
Senior Chief Evers (African American, male)	7	1	1	3	0	0	0	2	0	0
Senior Chief Sam (African American, male)	1	0	0	0	0	1	0	0	0	0
Chief Bryant (Caucasian, male)	2	0	0	2	0	0	0	0	0	0
Senior Chief Vela (Hispanic, male)	2	0	0	1	0	1	0	0	0	0
Senior Chief Jerry (Caucasian, male)	3	1	1	1	0	0	0	0	0	0
Senior Chief Jeffers (African American, male)	3	2	0	1	0	0	0	0	0	0
Chief Brent (Caucasian, male)	4	1	2	0	0	1	0	0	0	0
Chief Rolf (Caucasian, male)	2	2	0	0	0	0	0	0	0	0
Master Chief Arcelo (Asian, male)	3	2	0	1	0	0	0	0	0	0
Senior Chief Pay (Hispanic, male)	3	2	0	0	1	0	0	0	0	0
Master Chief Joe (Caucasian, male)	5	2	1	0	0	0	0	0	0	2

Table 6Poetic Modes (PM) of Stories Told by Ship Participants

continued on the next page

Rank, Pseudonym (Ethnicity, gender)	Stories Told (total)	Epic	Comic	Tragic	Roma- ntic	Comic- Epic	Tragic- Comic	Epic- Comic	Roman tic- Comic	Roman tic -Epic
Master Chief Ray (Caucasian, male)	5	4	0	0	0	0	0	0	0	1
Master Chief Quin (Caucasian, female)	4	1	0	0	0	0	0	0	1	2
Chief Cord (Hispanic, male)	1	1	0	0	0	0	0	0	0	0
Senior Chief Tray (Caucasian, male)	1	0	0	1	0	0	0	0	0	0
Senior Chief Tully (Caucasian, male)	3	1	0	1	0	0	0	0	0	1
PM Totals	63	33	6	12	4	5	4	2	1	6

Table 6, continued

The majority of stories collected for this study—44 of the 129 stories—were classified as epics. When epic stories were combined with epic hybrids almost 56 percent—72 stories—could be classified as strongly epic. There were the same number of epic stories—36 stories—told on the Ship as at the Academy, with roughly the same percentage of epic, or epic hybrid, stories told at each site—slightly over 50 percent.

The protagonists in the epic stories were often the storytellers themselves, but sometimes the protagonists were others who the storyteller admired. The protagonists in the epic stories usually faced a challenge or test of some kind that they were able to overcome through skill, determination, perseverance, courage, sacrifice, wit or ambition. The emotions evoked by the epic stories were pride, admiration, nostalgia and some envy—although admiration was a much more prevalent emotion than envy. The preponderance of epic stories was to be expected. As middle managers, Chief Petty Officers are constantly faced with epic leadership and management challenges and tests. Epic stories as a genre are a perfect example of stories that are used to make sense of the past and pass on that sense giving to others. As a result they help people cope, and they function as models for future behavior.

Forty percent of the stories—51 of the 129—collected for this study were comic or had strongly comedic qualities. It was difficult to differentiate between comic and humorous stories as Gabriel (2000) had, so the modes were combined under the comic mode for this study. There were more strongly comedic stories told at the Academy than on the Ship—33 stories at the Academy in contrast to 18 stories on the Ship. Again, this finding was to be expected. Just as the telling of one joke often prompts the telling of another joke in a group setting, the telling of a comic story often prompted the telling of another comic story. The participants at the Academy were in a relaxed group setting among peers that was conducive to telling amusing stories that would add levity to the discussion. There were some participants who told more comic, or comic hybrid, stories than others in the group, such as Master Chief Hassan (six stories), Master Chief Tom (four stories), and Senior Chief Dave (four stories). The individuals who skillfully told comedic stories seemed to be leaders in the group. That is to say, they were interrupted less, listened to more attentively, and told more stories, but did not totally monopolize the discussion; and the others in the group reacted to their stories with head nodding, smiles and clapping.

Many of the comic stories had a "gallows humor" (Gabriel, 2000, p. 65) quality. That is to say, they described grim, or ironic, situations that probably were not humorous at the time but in retrospect seemed comical. The comic stories were about mistakes, surprises and coincidences. In general they were cathartic, they added levity to the discussion and energized the group. Roughly half of the protagonists in the comic stories were the storytellers themselves. The storytellers who told comic stories about themselves usually cast themselves as non-heroic heroes, describing how they survived, or prevailed, when faced with misfortunes, mistakes, surprises, accidents or conundrums of some sort. Storytellers who cast themselves as the protagonists in comic stories usually used self-deprecating humor, and described how they had learned a lesson from the experience. Comic stories that used self-deprecating humor clearly evoked emotions of mirth and admiration.

Comic stories about others usually cast the protagonist as a deserving victim or fool. Such stories often exposed pomposity, arrogance or vanity in one of the characters, or a group of characters. Some comic stories had a passive aggressive subtext, and several evoked emotions of scorn or pity, in addition to mirth and amusement.

Twenty-nine stories—22 percent—were tragic or tragic hybrids. Thirteen of the stories at the Academy were tragic or tragic hybrids, and 16 of the stories on the Ship were tragic or tragic hybrids. The percentage of stories with tragic elements was slightly higher on the Ship, 25 percent as compared to 19 percent at the Academy. This finding was to be expected since the participants on the Ship were constantly grappling with the responsibilities, problems and challenges posed by supervising inexperienced young people in a high risk, industrial environment. The participants at the Academy were in a more relaxed atmosphere removed from the stresses and concerns of an operational environment—at least for a while.

The tragic stories were usually about the misfortunes of others, or they were stories about accidents—called mishaps in the Navy. The characters in the tragic stories were usually non-deserving victims suffering from some undeserved misfortune, crime, trauma, insult or injury. The storytellers and audiences of the tragic stories displayed traces of the following emotions: sorrow, pity, anger and some fear—but fear was usually masked by some other emotion such as anger or pity.

Twenty-four of the stories collected for this study fell into the romantic, or romantic hybrid, mode; 13 of the stories at the Academy as compared to 11 stories on the Ship. The romantic stories usually described shipmates or mentors who were greatly admired by the storyteller, or they described situations in which the protagonist had taken care of someone else. The women who participated in the study, per person, told more romantic stories than the men. The emotions evoked by romantic stories were mostly admiration, gratitude and nostalgia.

It was noted earlier that one joke often prompts another in a group setting, as if joke tellers are trying to compete with each other to tell the most humorous joke. This was also the case with storytelling in this study. While more focused time was spent with individual participants on the Ship in interviews, conversations and shadowing sessions, more stories were generated in far less time in the group interview sessions at the Academy. The telling of one story in the group interviews at the Academy always prompted the telling of another story in the same subject thread until the thread was played out and the topic changed, or until the subject thread morphed into a related subject with the cycle repeating itself.

Storied Spaces as Complex Adaptive Systems: Dominant Narratives

While themes, patterns, insights and understandings began to emerge when the poetic modes of the stories were identified, looking at the stories through a complexity lens, by applying the theories of Baskin and Boje and others, led to a deeper understanding of how and why stories functioned the way they do for the people and organizations in which they were found.

When the individuals and groups sampled for this study were viewed as complex adaptive entities nested within one another—or what Baskin (2008) called "storied spaces" (p. 1)—themes, described by Baskin as "Dominant Narratives" (p. 1) began to emerge from the data. The dominant narratives that emerged incorporated schemas, which in turn served to guide actions. The individual Chief Petty Officers, and the groups they belonged to, used dominant narratives and schemas to define and test reality and thus adapt to their environments.

While many dominant narratives were evident in the stories collected for this study there were six that stood out through repetition. These six dominant narratives were told by different participants, in different locations, at different times. Many of the stories collected contained more than one of the six dominant narratives, and others contained only one; but the six dominant narratives were clearly evident through repetition across the stories and across the participants.

In addition to the six dominant narratives that were repeated through the stories, there was one dominant narrative—"Some stories should not be told"—that was observed and implied through comments and reactions, both at the Academy and on the Ship. It has been included in this study as a dominant narrative because although it was not acknowledged in the actual stories the participants told, it did occur repeatedly in both locations at different times.

A grouping of the stories by dominant narrative is included in Appendix N. Tables 7, 8 and 9 list the dominant narratives and their frequency. Table 7 is an overview of the Dominant Narratives and their frequency at the different sites. Tables 8 and 9 are a more detailed breakdown of dominant narratives by participant.

Due to limited time and resources a detailed analysis of each story could not be included in this paper, but some stories, parts of stories and parts of the dialogue surrounding the stories were used here, in addition to Tables 7, 8 and 9, to describe the frequency of dominant narratives and interpret their meaning. The discussion of the dominant narrative findings illustrates how complexity science theory combined with narrative theory helped to answer the question of how and why stories have enabled the participants in this study to make sense, cope, and navigate into the future. Since the stories used as examples are quoted from the transcripts, organizational colloquialisms and acronyms have been translated, and are included in brackets where they are needed to enhance understanding of the story.

For example, Table 7 illustrates that the participants on the Ship repeated the dominant narrative of "Growth through uncomfortability"—the dominant narrative that was repeated most often—more frequently in their stories than the participants at the Academy. And Tables 8 and 9 show that the more senior individuals—the Master Chiefs—repeated this dominant narrative with greater frequency than the more junior Chiefs.

Tal	ble	7

Frequency of Dominant Narratives in the Stories Told

Dominant Narrative	Academy	Ship	Total
"Growth through uncomfortability"	22	31	53
"Take care of your people"	19	16	35
"Suck it up"	8	11	19
"Trust"	6	6	12
"Don't take yourself too seriously"	17	15	32
"Head on a swivel"	15	13	28

Rank, Pseudonym (Ethnicity, gender)	# of Stories Told	DN (1) Growth through uncomfort- abality	DN (2) Take care of your people	DN (3) Suck it up	DN (4) Trust	DN (5) Don't take yourself too seriously	DN (6) Head on swivel
Senior Chief Dee (Caucasian, female)	10	0	8	0	1	2	0
Master Chief Mike (Caucasian, male)	4	1	0	1	1	1	1
Master Chief Hassan (African American, male)	8	2	3	1	0	3	1
Senior Chief Brian (Caucasian, male)	5	3	1	1	0	0	0
Senior Chief Carl (Caucasian, male)	5	3	1	0	1	1	0
Master Chief Jeff (Caucasian, male)	6	3	2	2	1	1	2
Master Chief Eric (Caucasian, male)	4	2	1	0	0	0	2
Chief Jordan (Hispanic, male)	3	1	0	1	1	1	2
Senior Chief Shane (Caucasian, male)	3	1	1	1	1	0	1
Senior Chief Dave (Caucasian, male)	4	1	0	0	0	3	1
Senior Chief John (Caucasian, male)	6	2	0	1	0	2	2
Senior Chief Tracy (Caucasian, male)	2	0	0	0	0	0	1
Master Chief Tom (Caucasian, male)	5	2	2	0	0	3	2
Senior Chief Bob (Caucasian, male)	1	1	0	0	0	0	0
Dominant Narrative Totals	66	22	19	8	6	17	15

 Table 8

 Leadership Academy Dominant Narrative (DN) Frequencies

Rank, Pseudonym (Ethnicity, gender)	# Stories Told	DN (1) Growth through uncomfort- ability	DN (2) Take care of your people	DN (3) Suck it up	DN (4) Trust	DN (5) Don't take self too seriously	DN (6) Head on a swivel
Master Chief Cal (African American, male)	3	3	3	0	1	1	0
Chief Saul (Hispanic, male)	1	0	0	0	0	0	0
Senior Chief Tim (Caucasian, male)	7	4	1	1	1	4	3
Chief Sara (Caucasian, female)	3	0	3	0	0	0	1
Senior Chief Evers (African American, male)	7	3	2	1	1	2	1
Senior Chief Sam (African American, male)	1	1	1	1	0	1	0
Chief Bryant (Caucasian, male)	2	1	0	1	0	0	1
Senior Chief Vela (Hispanic, male)	2	1	0	1	0	1	0
Senior Chief Jerry (Caucasian, male)	3	1	1	1	1	0	0
Senior Chief Jeffers (African American, male)	3	1	0	1	0	0	0
Chief Brent (Caucasian, male)	4	3	0	0	0	3	0
Chief Rolf (Caucasian, male)	2	0	0	0	0	1	0
Master Chief Arcelo (Asian, male)	3	2	0	0	1	0	0
Senior Chief Pay (Hispanic, male)	3	1	1	0	0	0	1
Master Chief Joe (Caucasian, male)	5	4	1	0	1	1	1
Master Chief Ray (Caucasian, male)	5	1	1	1	0	1	0

Table 9Ship Participants Dominant Narrative (DN) Frequencies

continued on the next page

Rank, Pseudonym (Ethnicity, gender)	# Stories Told	DN (1) Growth through uncomfort- ability	DN (2) Take care of your people	DN (3) Suck it up	DN (4) Trust	DN (5) Don't take self too seriously	DN (6) Head on a swivel
Master Chief Quin (Caucasian, female)	4	4	1	3	0	0	1
Chief Cord (Hispanic, male)	1	0	0	0	0	0	1
Senior Chief Tracy (Caucasian, male)	1	1	0	0	0	0	1
Senior Chief Tully (Caucasian, male)	3	0	1	0	0	0	2
Dominant Narrative (DN) Totals	63	31	16	11	6	15	13

Table 9, continued

Dominant Narrative One: "Growth through uncomfortability"

The Dominant Narrative of "Growth through uncomfortability" reflected the theme that it is acceptable to make mistakes, and that people need to make mistakes to grow. This dominant narrative prescribed a way of responding to information and the environment of the storied spaces of the Navy, the Chiefs' Mess, the Ship, and the Academy.

The following personal epic is an example of a story that reflected the dominant narrative of "Growth through uncomfortability." In this story Master Chief Cal, a dignified, African American male in his 50s, described how he came to be where he is today. Master Chief Cal is the Air Department master chief. The Air Department is the largest department on the Ship with approximately 700 sailors.

Master Chief Cal's story

There is no good reason why I should be where I am today. Most of the guys from my neighborhood are dead or in prison. I figured the Navy was my way out. I got into a lot of trouble early on and practically got kicked out a couple of times. I went to captain's mast [non-judicial disciplinary proceedings] for fighting, alcohol, drugs, you name it. The captain would throw the book at me—I was restricted and busted [reduced in rank]. I got my ass chewed plenty. But when I was at work I was okay, I worked hard and did my job—that is what saved me. My problem was that I got into trouble when I was on the beach [off the ship]. I was a hard head. It was painful but eventually I learned. So I tell these kids today "Ass chewins' are free"—it's a free lesson right there and you don't pay nothin' for it—learn from it. Master Chief Cal chuckled and added, but learn from it before I did, because the way I learned is just too damn painful! Even hard heads like me can learn, I call it "Growth through uncomfortability."

In this story Master Chief Cal said that it is acceptable to make mistakes and that mistakes are an integral component of growth. Master Chief Cal used this story to explain—make sense of—how a young man who grew up in a rough neighborhood could succeed; he used this story to make sense of how he had survived while others have not. This dominant narrative has provided Master Chief Cal with a way to respond when he makes a mistake or receives information about others who have made mistakes.

All of the stories Master Chief Cal told for this study (three of three) contained this dominant narrative. As the master chief responsible for the largest number of people on the Ship, Master Chief Cal is constantly dealing with mistakes that people have made; the dominant narrative of "Growth through uncomfortability" provides him with a schema for how to respond to his environment. Other Chief Petty Officers on the Ship and at the Academy used similar phrases. Master Chief Cal regularly tested the schema of "Growth through uncomfortability" as he dialogued with others on the Ship.

Some of the participants in this study, such as Master Chief Cal, emphasized "Growth through uncomfortability" more than others. The Chief Petty Officers on the Ship repeated this dominant narrative with greater frequency than the Chief Petty Officers at the Academy—half of the stories collected from the Ship participants reflected this dominant narrative, while one third of the stories collected from the Academy contained references to "Growth through uncomfortability."

The dominant narrative of "Growth through uncomfortability," identified through key words and phrases, reoccurred in 53 of the 129 stories analyzed for this study. Some other phrases used to express this dominant narrative were: "People make mistakes so smack yourself and get back to work" (Senior Chief John), "Ass chewins' are free" (Master Chief Cal), "Live and Learn" (Senior Chief Tim), and "You can grow out of being a screw up" (Master Chief Joe), "18-20 year olds are going to make mistakes and there's just not much you can do about it" (Senior Chief Tray). As the following tables illustrate, all but two of the 14 participants at the Academy and all but five of the 20 participants on the Ship repeated this dominant narrative in at least one of their stories.

In the following story and antenarrative Master Chief Cal discussed how the Navy has changed. In this narrative and antenarrative he was testing the dominant narrative of "Growth through uncomfortablity"; he was suggesting that sometimes people in the Navy do not have the luxury of learning from their mistakes. He was suggesting that while it is acceptable to make mistakes, sailors are expected to learn and not repeat the same mistakes. He was also saying that some mistakes are unforgiveable and he felt somewhat conflicted about that. The interplay between the dominant narrative and the antenarrative in the following passage reflected Master Chief Cal's attempt to resolve the dissonance he perceived between what the Navy was like when he was a young sailor and what it is like today.

Master Chief Cal's Story continued...

I don't think I would make it in the Navy today. Two alcohol incidents and you get kicked out. One drug offense and you get kicked out. Sex on the ship is a court martial offense. The climate is tougher today. And it is hard to get through to these kids. I love it when we are at sea—at least you have a fighting chance of controlling their behavior, but it is almost impossible when they are on the beach [off the ship]. We [the Chief Petty Officers] try to get through to them before they get into trouble we cannot get them out of, but sometimes it seems like we are fighting a losing battle.

In the following story Master Chief Cal gave an example of how the environment has changed since he was a young sailor.

MJ in the Salsa

We had this kid at mast the other day who popped positive [random urinanalysis test for drug use] for marijuana. It was his second positive for marijuana. The first time he got off because he had his wife and her mother come in and tell the Captain that they put marijuana in the salsa. The captain bought it and let him off. But the salsa defense only works once. He popped positive again and he was history—no questions asked.

Master Chief Cal was not defending the young sailor who "popped positive for marijuana." Rather he was affirming his support for the Navy's "zero tolerance" illegal drug use policy, even while he wondered if he could even "make it in the Navy today" given such policies. He was expressing trust in the Navy's random urinalysis testing program, but he was saying that there are exceptions to the "zero tolerance" rule. Through his stories and antenarrative, Master Chief Cal was expressing the dualities between dominant narratives, and negotiating schemas to adapt to an environment that has changed since he was a young sailor, and which continues to change.

Master Chief Cal also referred to "controlling behavior" and how it is easier to "control sailors' behavior" when the Ship is at sea. Master Chief Cal expressed frustration that the behavior of the young sailors was beyond his control. This lack of control troubled Master Chief Cal as a supervisor.

The following story illustrated another aspect of the dominant narrative "growth through uncomfortability." This story illustrated that members of this storied space were expected to learn from the mistakes of others. In this story Chief Jordan, a Puerto Rican-American in his 30s, attending the Academy, described an uncomfortable incident that took place on a deployed submarine. Chief Jordon survived this incident—which made this account a personal epic—but it could just as easily have resulted in a tragedy for Chief Jordan.

The Bow Planes Incident

I was on a Sea Wolf [a type of submarine] and even though the class [this type of submarine] has been out for 12 or 13 years, we were still working the bugs out. And we were having problems with the bow planes [large retractable stabilizers that are used to help maneuver the submarine]. The automatic system jus' wasn't workin'. So the Captain and XO [Executive Officer], the engineer and myself gets together and we decide that we would work the bow planes manually until we work the bugs out and since I had the "A" gang [sailors who work in auxiliary engineering], and I was the one dealing with all the hydraulics, and I knew the electrical system pretty good, I would be the one to manually operate the bow planes with a couple of sailors until we worked the bugs out. But then one day the Captain comes into the control room and he wants to retract the bow planes, so he says to the OD [Officer of the Deck], "We gonna retract the bow planes" so the OD tells the messenger to go get me. It's a submarine so he needs to find me, even though submarines are not big he doesn't know where I am, so it's gonna take a couple minutes. So two minutes later the Captain comes back into the control room and he is getting angry and he says, "I said retract the bow planes!" And the OD says "Sir, they're looking for Jordan now, he should be here in a minute" and the Captain's like "This is my fucking ship, I said retract the bow planes, DO IT NOW!" And so the OD this JG [young lieutenant] says "Yes sir!" and he hits the button on the panel to retract the bow planes and at that moment I walk in

and I see what's goin' on and I says "What? You guys retracted the bow planes?" and the OD looks at me, and the Captain looks at me, and I say "Are you crazy?" And everybody looks at me, expecting the Captain to chew me out because I jus' said "Are you crazy?" so I went over to the panel to where the controls for all the hydraulics are to try to stop it and as I am walkin' over to the control panel I hear this big BOOM and the whole submarine shudders and what happens is that the bow planes went part way and got stuck. And so now I can jus' picture what has happened—this big piece of equipment jus' got tore up—there are gonna be big damages. And then the Captain is all desperate because he knows his ass is on the line and he says "Jordan, what can we do?" And I says "Sir, the only thing we can do is try to unjam it manually." So the Captain says "Well, jus' do what you need to". So I try to unjam it but it is jus' not working. So I says "Sir, we can't do it, we are going to need to surface and we may need to pull into port." And he looks down and stamps his foot and he is like "FUCK, FUCK, FUCK, FUCK, FUCK!" and he went to his stateroom and he didn't come out until the next morning jus' before we were about to pull pier side. He didn't talk to no one. He was acting jus' like a little kid.

This story energized, and resonated with, the group, and sparked a series of stories about leaders who were not willing to own up to their mistakes. Everyone in the group had a story to tell about a leader who made life miserable for the people who worked for them and displayed behavior that the observer vowed never to repeat. Master Chief Jeff made the following observation in the discussion that followed the telling of "The Bow Planes Incident."

Ya know, it's interesting, we all have these stories about the assholes we have worked for, they seem to make an impression and if you survive you learn what you don't want to be like. But what about the guys who are just doin' their job, and gettin' the job done, day in and day out? You never hear much about them. What's up with that?

In this passage, Master Chief Jeff observed that the stories that stand out are the ones that reflect some dissonance and an attempt to make sense of that dissonance. The stories about poor leadership reflect discomfort, how to survive discomfort, and how to learn from it. Interesting stories have a plot; that is to say, a predicament that the protagonist must survive or a problem that the protagonist must solve. Therefore examples of poor leadership often contain the ingredients of compelling stories, but stories about excellent leaders also contain the ingredients of compelling stories.

Dominant Narrative Two: "Take care of your people"

The dominant narrative "Take care of your people" was reflected in many of the stories collected for this study; it was expressed through phrases such as: "take care of your shipmates" (Master Chief Hassan), "take care of your brothers and sisters" (Senior Chief Dee) and "take care of your fellow Chief Petty Officers" (Senior Chief Tully). Many of the stories that reflected this dominant narrative emphasized the importance of teamwork and sharing in the glory of a job well done.

In the following story Senior Chief Dee, a Caucasian female in her 40s, attending the Academy, described one of her mentors and how her mentor helped her survive and become successful. This story is a romantic epic because through the intervention of a hero, whom she admired, Senior Chief Dee survived and prevailed.

New Chief Brings Hope

I was basically stuck as a 2nd class petty officer. I was really frustrated. I couldn't seem to advance and I thought I was going to get out of the Navy. But then in walks our new chief. She had made chief in nine years and I was like "Wow, super woman." And she was like a real shy kind of person. In her shy way she got to know everyone. Morale was bad in the division when she came. There were little clicks and everybody was always complaining about one thing or another. And she came in and got us studying so that we would make rate and started making studying fun. And she got us involved in community service. We did Meals on Wheels and stuff like that. And it was just great. And all of sudden we were like a team and there was camaraderie. Thanks to her, we all made rank, every single one of us. I thought I was going to retire as a 2nd class and here I am today a senior chief. She had an impact on everyone who was there. She brought out the best in us. She put me in for sailor of year and I thought, "Wow, I never dreamed that I could be sailor of the year" and I actually got it. And she got an award when it was time for her to transfer and she read it to the division, she said "this is not my award, this is your award, this is what you [the division] did." We still keep in touch and she is doing really well—she went LDO [Limited Duty Officer]—she's a lieutenant now. I would have gotten out of the Navy if it wasn't for her.

Senior Chief Dee said that she has tried over the years to model the behavior of her mentor. In the context of the interview Senior Chief Dee was using the story of her mentor to make sense of what had happened to her, and she was using the dominant narrative of "Take care of your people" to prescribe a schema—behavior required to successfully navigate into the future—in her dealings with the people she will supervise in the future.

Thirty-five of the 129 stories analyzed for this study reflected this dominant narrative in some way. Eight of the 14 participants at the Academy and 11 of 20 participants on the Ship told stories that contained words or phrases that supported this dominant narrative. Approximately one third of the stories at both the Academy and on the Ship reflected the dominant narrative of "Take care of your people."

In "New Chief Brings Hope" Senior Chief Dee described a storied space (Baskin, 2008) that was energized by the introduction of a new supervisor. The complex adaptive system of the division was invigorated through an open exchange and flow of energy, catalyzed by the new supervisor. Senior Chief Dee said "We all made rank, every single one of us," evidence that the entire division benefited from the actions of the new supervisor as individuals and as a group.

Although dominant narratives prescribed schemas, conflicts and contradictions between dominant narratives and schemas were apparent. Several of the participants on the Ship and at the Academy alluded to contradictory schemas prescribed by the dominant narratives "Growth through uncomfortability" and "Take care of your people." Master Chief Jeff, a participant at the Academy, said, "We are expected to coddle these kids too much nowadays." And Senior Chief Tray alluded to the inadequacy of the "Growth through uncomfortability" schema in a discussion about the problems that arise when young sailors are on liberty.

A lot of chiefs resent the baby-sitting they have to do today. This 'zero mistake mentality' is ridiculous. Eighteen to 20 year olds are going to make mistakes and there is just not much you can do about it. At least when we are at sea they are contained but when we are in port you cannot control everything.

Both the Chief Petty Officers at the Academy and on the Ship were at times negotiating a delicate balance between dominant narratives that prescribed conflicting schemas such as "growth through uncomfortability" and "take care of your people." There was an ongoing process of figuring out how to modify, change or reject schemas as the participants attempted to make sense, give sense, cope and adapt to the future.

Dominant Narrative Three: "Suck it up..."

The dominant narrative "Suck it up" appeared in many of the stories told by the participants at both the Academy and on the Ship. This dominant narrative reflected the schema that both individuals and groups in the organization are expected to follow rules, conform, and not complain about discomfort. Participants who told stories that contained this dominant narrative used expressions like "suck it up" (Senior Chief Jeff), "life is not fair—get used to it" (Master Chief Quin), and "this is a warship not a friendship" (Senior Chief Jerry).

The following epic-comedy is an example of the dominant narrative "Suck it up." This story was told by Senior Chief Sam, a large African American male with a shy smile who looked like a football linebacker—which, in fact, he was in high school. Senior Chief Sam, an AB (Aviation Boatswain mate) was in charge of the Arresting Gear Division on the Ship—the division that maintains the thick metal cables and machinery that the aircraft hook when they land on the flight deck. He told the following story while supervising several sailors doing maintenance to the equipment during a pause in flight operations.

The Arresting Gear Machine Compartment (room) was located directly below the flight deck. It smelled like hydraulic oil on hot metal and the entire room shuddered when jets slammed into the deck and hooked the cables. It was hot and it was impossible to carry on a conversation during flight operations due to the loud whirring of machines, cables and jet engines. The work looked extremely demanding and intense. The Aviation Boatswain Mates on the Ship were a rough, tough, group of mostly men.

In "AB or Wanna Be" Senior Chief Sam described how he came to join the Navy and how he became an AB. There is a "trickster" (Gabriel, 2000, p. 77) in this story —a Navy recruiter who is a salesman focused on making his quota.

AB or Wanna Be?

The recruiter said "So when can you be ready to go?" And I said "I'm not doing anything else right now, so I guess I could be ready to go tomorrow." Well the recruiter's eyes lit up when I said that and he said "Could you excuse me a minute while I make a phone call?" And he goes off and makes a phone call and comes back and says, "You're in luck. We just happen to have an opening and you can leave tomorrow." I was a little nervous then and I said, "Well, what will I be doing?" And the recruiter said "I suggest you go 'undesignated' [no extra schooling for a technical specialty] then when you get out to the fleet you can shop around, try out different jobs, and see which one you like best." So I signed on the dotted line and shipped out for Boot Camp the next day. I made it through Boot Camp and when I arrived at the carrier [aircraft carrier], there were about eight of us that checked in that day. Four of the guys were sent off to various departments because they were "designated" [they had already been trained for technical specialties] and the four of us who were "undesignated" were sent to deck-from there I was sent to work with the arresting gear. It was hot. It was hard. It sucked! So the next day I thought, "I'm not goin' back there, I'll go work in the ship's post office instead." So I went down to the ship's post office and the chief there says, "What are you doing here?" And I said, "Well, I was working with the arresting gear yesterday and I know I don't like that so I thought I would come down and try working here." And the chief gives me this [disgusted] look and says, "Now look son, that's not how it works. You get your ass back up to deck. I'll let the master chief know you are coming." When I got back up to the Arresting Gear Machine Compartment the Master Chief was waiting for me and he says, "Why didn't you report for work today?" And I said "With all due respect Master Chief, I did not like the work much vesterday and my recruiter told me that if I was "undesignated" I could shop around and try different jobs until I found one I liked. That old Master Chief looked like he was about to explode, and he says, "Son, there are only two ratings in the Navy, AB and Wanna Be, now which are you gonna be an AB or a Wanna Be?" And I said "I guess I wanna be an AB, Master Chief" and he said, "Right answer! Now get to work!" And here I am today.

The Navy always needs undesignated seamen to work in the deck departments on ships. The work is grueling and it is mostly learned through on the job training. The day that Senior Chief Sam walked into the recruiting office, the recruiter saw an opportunity to make a quick sale and fill a quota. He took advantage of Senior Chief Sam's ability to leave for Boot Camp the next day. But the story had a happy ending—Senior Chief Sam has had a successful career and was obviously fiercely proud of his technical specialty. Senior Chief Sam was a survivor.

Senior Chief Sam used "AB or Wanna Be?" to explain how he came to be an Aviation Boatswain mate—he used the story to make sense—but he also used the story to describe some of the qualities needed to survive in the organization, such as a sense of humor and a willingness to conform. There was a young sailor doing maintenance nearby while Senior Chief Sam was telling this story; when asked if he had ever heard the story before and he said, "You mean 'Do you wanna be an AB or a Wanna Be?' Oh yeah!" Senior Chief Sam had obviously told this story to his subordinates to help them make sense and help them feel proud of what they do. Through this story he was providing his subordinates with a schema for how to behave and survive in a demanding environment.

The dominant narrative of "Suck it up" was present in at least 19 of the 129 stories analyzed for this study. Eight of the 14 participants at the Academy and seven of the 20 participants on the ship told stories that reflected this theme. Roughly 12 percent of the stories at the Academy and 17 percent of the stories told on the Ship reflected this theme. Tables 8 and 9 summarize the frequency of this dominant narrative.

The dominant narrative of "Suck it up" often worked with the dominant narrative of "Growth through uncomfortability" implying that individuals experiencing "uncomfortability" were expected to "suck it up," but the 19 stories listed in this category included distinct references to the need for individuals to "suck it up," or subjugate their personal needs to the needs of the organization.

Just as there was dissonance at times between the dominant narratives of "Growth through uncomfortability" and "Take care of your people," there was also dissonance at times between "Suck it up" and "Take care of your people" and "Growth through uncomfortability." In the following excerpt from the discussion that followed the telling of "AB or Wanna Be," Senior Chief Sam was negotiating, through antenarrative, common ground between competing dominant narratives.

Senior Chief Sam continued...

One of my biggest challenges is making sure the guys are getting what they need to do the job. During flight ops [operations], depending on conditions, we might not be able to stop for a hot meal [during a 12 hour shift]. This is hard work and lots can go wrong. If we can't break the guys loose to go down to chow I make sure that we at least get something brought up here from the galley. It might not be a hot meal but I make sure they get something and we make sure that they get a break if they need one. You need to be able to read people in this job. You need to know your guys. You need to be able to see it when someone needs a break or someone is going to get hurt.

Through the interplay of dominant narratives and antenarratives, Senior Chief Sam described how he was coping with the dissonance and tension in his environment, and discovering actions that he and the group must take to survive. He was saying that there is a balance between taking care of your people and expecting them to "suck it up." He was saying that he did not want "his people" to make mistakes, because in his line of work mistakes can be fatal. He was saying that he could expect them to only "suck up" so much before they break down. He said that he needed to be able "read them"—like reading a story—to know when they needed to be cared for rather than pushed.

One of the female Master Chief Petty Officers on the Ship, Master Chief Quin, echoed the dominant narratives of "Suck it up," "Take care of your people," and "Growth through uncomfortability," in several of her stories. It was apparent in observations of her dealings with the sailors who worked for her that she expected them to conform, do their jobs and not complain, but she also implied that if they did so she would take care of them. Master Chief Quin was a tall, trim Caucasian female in her early 40s. Her dark hair was neatly pulled back into a bun at the nape of her neck. Her specialty was human resources. In the next two personal epics Master Chief Quin addressed the dominant narratives of "Suck it up," "Growth through uncomfortability" and "Take care of your people."

Raised by Wolves

I was part of the first wave of women to be sent to sea. When I was a young seaman, like all young seamen, I was sent to do a stint of "mess-

cranking" duty [the dirty work involved in food service and clean-up]. I had the good fortune of being sent to the Chiefs' Mess to do mess cranking. I don't think I would be where I am today if that hadn't happened. Those guys formed me. They taught me. They were tough but they were fair. You couldn't be thin skinned or wear your heart on your sleeve. But you also couldn't be around them and not pick up on what it meant to be a good leader. I learned enough about leadership in three months of mess cranking in the Chiefs' Mess to sustain me for an entire career. If you were willing to work hard and willing to learn, they took care of you.

Master Chief Quin echoed Master Chief Cal's comments when she said, "If you were willing to work hard and willing to learn they took care of you." This phrase, repeated by both Master Cal and Master Chief Quin, described a schema that had worked for them. It also reflected behavior they expected to see and would reward in their subordinates.

There were two other younger women present when Master Chief Quin told the following story, another Chief Petty Officer and a young petty officer. In "Single Parent on sea duty" Master Chief Quin described how she had to "suck it up" and suffer through personal sacrifices to succeed in the Navy.

Single Parent on Sea Duty

It hasn't been easy. Right after I made senior chief I was sent back to sea duty. I was divorced at the time and my son was young. I was stationed on the West Coast and my "ex" was on the East Coast. My son had been with

me since he was born. He would spend some time in the summer with his father but most of the time he was with me. The Ship was working up for deployment. We were going to deploy in January. My son was going to stay with me until deployment and then go to the East Coast and stay with his dad while I was gone [six months]. It was September and already I was having trouble arranging for caregivers while we were out at sea for a week here and a week there, working up to deployment. My friends and neighbors were super supportive. They were always willing to take him in when I had to go to sea but I looked at the work up schedule and it was brutal—we were going to be gone a lot. It was breaking my heart to always have to leave my son with someone else while I was at sea. Finally I just had to face it, it was not a good situation for him and it was selfish of me. I wanted to keep him with me so much but I just couldn't do it. It broke my heart but I had to call up my ex and ask him if he could take him in September rather than January. It was so hard, but it was what I needed to do.

Tears welled up in Master Chief Quin's eyes as she told this story, and the young petty officer listening to the story became teary as well. Master Chief Quin was describing schemas that she used to survive and be successful, and she was prescribing schemas that the two younger women in the room would need to imitate if they wanted to one day be master chiefs in the Navy. When the two younger women in the room were asked about their plans for the future, the young petty officer commented that she planned to get out of the Navy: "I want to have a family. My boyfriend is in the Navy and I just don't think I could do it [have family and stay in the Navy]. It would just be too hard." But the young Chief Petty Officer who had been listening to the story said that she intended to stay on active duty and have a Navy career.

A few moments after Master Chief Quin told the two previous stories, a young, non-rated, male sailor, who was being discharged from the Navy and would soon leave the Ship, appeared at Master Chief Quin's door with his checkout sheet for her signature. His shirt was wrinkled and his shoes were not shined. He had several small wooden pegs in his ears to keep his ear piercings from closing up (male sailors are not allowed to wear ear rings in uniform). He did not look at the master chief as he handed her his form to sign. She rose to her full five foot, nine inch height as she looked over the form and took a deep breath. Before signing it and handing it back to him she said, "You understand that you've got 180 days to join the reserves after you get out and you will not lose your credit for time in service?" He mumbled that he understood. She then said, "Seaman Smith, for the next three days you are still in the Navy—look at me—while you are in uniform those pegs in your ears should not be visible." His face turned red, he mumbled something that could have been "Yes, ma'am," and quickly departed as soon as he had his signed form in hand. After he left Master Chief Quin let out a disgusted sigh and said,

There is a perfect example of a kid who is going nowhere, you could tell by just looking at him. He has been in the Navy for four years and he hasn't done a damn thing. He hasn't made rate. He hasn't gone to school. He hasn't tried to learn. Such a waste. If he is lucky he'll get a job at Jiffy Lube or MacDonald's, or someplace. Someday he may look back and regret wasting the past four years of his life, but for some it never clicks. Master Chief Quin was able to quickly shift from being a sensitive parent, filled with love for a child, to being a stern Navy master chief—perhaps even a "wolf." She was not going to let a sailor who was not "sucking it up" get away without at least one last "free ass chewin'." The young women who observed Master Chief Quin's exchange with the non-conforming seaman got a leadership lesson. They were learning the schemas that Master Chief Quin learned from the "wolves" who taught her. But Master Chief Quin had adapted the lessons she learned to suit her view of reality and her persona; through her earlier display of emotion she was telling her subordinates that you can be a tough master chief who "chews ass" and still cry.

Dominant Narrative Four: "Trust..."

The need for trust was a dominant narrative that emerged from many of the stories collected for this study. Phrases and key words that reflected this dominant narrative were: "trust your gut" (Chief Saul), "trust your shipmates" (Senior Chief Jerry), "trust the system" (Master Chief Mike), and "Rules, or SOPs (Standard Operating Procedures) are written in blood" (Senior Chief Evers and Chief Rolf).

In the following story, Senior Chief Jerry, the chief in charge of the Electronics Warfare Division, referred to the "Stark incident"—an incident that took place during the Iran-Iraq war in 1987. In 1987, an Iraqi fighter jet fired two missiles at the USS Stark, a Navy warship. The missiles hit the ship. Thirty-seven sailors were killed and 21 were injured in the incident.

Senior Chief Jerry was in charge of the division that monitored the radar and sonar equipment on the Ship that was designed to detect enemy ships, enemy aircraft, and enemy weapons that might be a threat to the ship. Therefore, the Stark incident had special relevance for the sailors who worked in Electronics Warfare. Senior Chief Jerry was a Caucasian male in his late 30s. He was short in stature, walked fast, talked fast, and had a ready wit. The following discussion took place in the Electronic Warfare compartment on the Ship. The compartment was rather dark—illuminated mostly by fluorescent lights on the screens of the radar and sonar scopes that lined the room. Approximately eight sailors sat at various stations around the room monitoring the flashing blips on the scopes as Senior Chief Jerry admonished them to "Remember the Stark,"

Remember the Stark

I am the old Yoda here. Most of these kids are too young to remember incidents like the Stark—they were babies in 1987. So I tell them these stories over and over again. I say remember what happened on the Stark. I was a seaman at the time. I was not on the Stark. I was on another ship but I will always remember that day and I want these guys to remember so they don't make the same mistakes. The Stark didn't get off a single shot in its defense. They did not pick up those missiles on radar—that should not have happened. The guys who were killed were the ones asleep in their racks in berthing, not the guys on duty. So I tell these guys—your shipmates are depending upon you to do your job. If you have any questions about what you see on the screen, look it up, ask someone else to take a look, trust your gut, if something doesn't look right check it out.

Although "Remember the Stark" was not a proper story by itself it contained a reference to a proper story—the Stark Incident—that was a tragedy. The sailors who

listened to Senior Chief Jerry's admonition to "Remember the Stark" said that they were familiar with the Stark incident and other tragic incidents they studied, or Senior Chief Jerry told them about, even though "they were babies" when many of the incidents occurred.

The observation and dialogue recorded above reflected competing dominant narratives as Senior Chief Jerry negotiated schemas he—and the people in the storied space of the Electronics Warfare Division—must follow in order to survive. In contrast to the dominant narrative of "Growth through uncomfortability," Senior Chief Jerry, like Master Chief Cal, was saying that sometimes it is not okay to make mistakes, but he was admonishing the sailors in the division to learn from the mistakes of others. He was saying "trust your gut" but check your perceptions with someone else. He was telling the sailors who worked for him that their shipmates "trust" that the Electronics Warfare Division is doing its job. He was telling the sailors who work for him that one small blip on a screen that they miss, or that they do not check out, can result in disaster and loss of lives.

Thirteen of the 129 stories analyzed —roughly ten percent of the stories on the Ship and at the Academy— contained some reference to the dominant narrative of "Trust..." While only ten percent of the stories actually included the word "trust" it was a sub-text in many of the stories and worked with other dominant narratives to inform schemas. Five of the participants at the Academy and six of the participants on the Ship spoke about the importance of "trust" in the stories they told.

Another reoccurring phrase that reflected the dominant narrative of "Trust" was "SOP's (Standard Operating Procedures) are written in blood." Six of the Chief Petty Officers on the Ship, and two at the Academy used this phrase. Senior Chief Rolf, a boatswain mate in the Deck Department on the Ship explained the need to follow standard operating procedures and rules this way,

Every one of the SOP's [Standard Operating Procedures] we have has a story behind it—an incident that happened. Somebody lost an arm, or a leg, or was killed. That is why the SOP was written. I try to explain this to these young sailors when I have time. I try to tell them about an incident I know about, or a personal experience I had, or a reason, but sometimes I am not there or there is not time and they just need to follow the SOP.

The implication was that standard operating procedures and rules help individuals and organizations survive in an unpredictable, dangerous environment. But even though "SOP's are written in blood" they apparently are not etched in stone. Senior Chief Rolf explained that standard operating procedures are often changed or modified in response to new information, he said, "There are always new SOP's and some change. Something happens. Someone gets hurt and we get a new SOP." But while emerging incidents have resulted in new standard procedures or changes to old standard procedures, the dominant narrative of "Trust..." has prevailed.

The dominant narrative of "Trust..." often occurred in tandem with the dominant narrative "Suck it up." Master Chief Cal expressed the need to trust this way,

There are times when you just need to do what you are told—there just isn't time to ask questions—you need to do what you are told and do it now. You need to trust that the people you are working for know something you don't, or have information you don't have—there's just no time to ask questions.

Master Chief Hassan, one of the instructors at the Academy, was testing the flexibility of this dominant narrative when he cautioned, "When something doesn't feel right you need to trust your gut. You need to have the courage to ask the hard questions."

In the following story Master Chief Hassan described a disciplinary system breakdown that threatened to erode the trust of the crew. Master Chief Hassan was an African American male in his 40s. He had a low raspy voice and a way of telling stories that made everyone very attentive.

Dude, What Happened?

I was on a Spruance Class Destroyer [a medium sized warship] and I was walkin' by the Master at Arms office one day and I see this kid with his arm wrapped in gauze and I says "Dude, what happened to you?" and he says "Do you really want to know what happened Chief? Because no one else seems to want to know what really happened." And I says, "Sure, tell me what happened." And he explains that he was in the chow line and he was grab assin' with one of his buddies and in the process he bumped into the tray of the female sailor in front of him and her orange juice spilled, and she came unglued and turned around and threw a cup of hot coffee on him, burning his arm. And now he was on report [facing disciplinary action] for starting a fight. And I am thinkin' to myself there are two sides to every story and I am sure I will hear the other side of this story at a Disciplinary Review Board [a disciplinary review at which the chiefs

decide if a minor incident should go to Captain's Mast] and it will get sorted out there. So I go about my business and the next day I find out this incident isn't going to Disciplinary Review Board-this kid went straight to Captain's Mast and the Captain threw the book at him. So I go to the Command Master Chief and I say, "What's up with this? Why didn't this incident even go to Disciplinary Review Board?" And the Master Chief says, "Your young friend was messin' with the wrong girl." Well, I come to find out that the girl who threw the cup of coffee was the Executive Officer's yeoman and a shoo-in for Sailor of the Year. So I tell the Command Master Chief "This just ain't right. This shouldn't have gone to mast. Nobody even listened to Seaman Roger's side of the story. There were other people who saw this. They're not stupid. What kind of a message is this going to send to the crew—that if you're the XO's yeoman you can get away with whatever shit you want?" I was a brand new chief at the time and I was just disgusted with the whole Mess [Chiefs' Mess]. I thought I don't know if I even want to be a part of this group of pussies. I got up at the next chiefs' meeting and I told them it was a travesty. Sometimes somebody needs to stand up and ask the hard questions. We blew our trust with the crew on that one and it would be hard to get it back.

In "Dude What Happened?" Master Chief Hassan described a system breakdown. He described losing the trust of the crew due to a perceived injustice. Master Chief Hassan was using this story to prescribe schemas for the other chiefs in the room; he was saying that sometimes you need to challenge the members of your storied space to do what is right—you need to "trust your gut" even when it means going against the grain. Through this story, Master Chief Hassan implied that trust is reciprocal. He was saying that the sailors needed to feel that they could trust their supervisors and vice versa for the system to work. In this story Master Chief Hassan was making sense and giving sense. Through the negotiation between dominant narratives and antenarrative dialogue Master Chief Hassan was prescribing a delicate balance between schemas.

In the following story Master Chief Arcelo, an Asian-American in his 40s who was in charge of the Aviation Maintenance Department (the department that repairs broken aircraft equipment) on the Ship, described trusting in his own abilities and inspiring trust in others. Master Chief Arcelo described reporting to the Ship after the Aviation Maintenance Department had failed a major inspection.

We're Gonna Ace It!

When I reported to the Ship morale was really low in AIMD [Aviation Intermediate Maintenance Department]. They had just failed an AMI [Aviation Maintenance Inspection]. I heard all these stories about how bad they were. After the Ship won the Battle E [an award for excellence] the Captain came down to the Mess [Chiefs' Mess] and he asked every department to stand up for a standing ovation with the exception of AIMD because they had failed. They felt really singled out and bummed out. And so when I came in they were preparing to be re-inspected. And everyone was like, "We're gonna fail again." They were a sorry group. They were acting hopeless. And I come in and says, "I have never failed an AMI and I am not going to start now. We're Gonna Ace It!" And they were like, "Yeah, yeah, yeah, how we gonna do that master chief?" And I started to look at things and we started to make some changes and I just kept saying, "We're Gonna Ace It!" And pretty soon they were like "Okay, maybe we can pass." And I was like "We're Gonna Ace It!" And as we got closer to the re-inspection I think they actually started to believe that it was possible. And when it came time for the re-inspection we aced it.

The maladaptive narrative of "we are failures and we are going to fail again" was holding the department back. Master Chief Arcelo came in with a new narrative that helped them break from a maladaptive pattern.

Often the dominant narrative, and schema, of "trust..." was reflected in stories that had the theme "You are part of something bigger than yourself"—a theme that was either overtly stated or implied in many of the stories collected. Many of the participants told stories that reflected tremendous pride, patriotism and commitment to the organization's mission and the Navy's mission. The mission was perceived as noble. And this commitment and trust in "something bigger than yourself" enabled the protagonists in the stories to cope when they needed to "suck it up."

In the following epic story "9/11 on the Connie," Senior Chief Tracy, a Caucasian male in his late 30s at the Academy, described how he and his shipmates made sense of the events that unfolded on September 11, 2001 and the days that followed. He described how he was willing to make personal sacrifices to carry out the mission of the Navy to defend the country against attack.

"9/11" was actually the first day I wore khakis [his new chief's uniform]. I will never forget that day as long as I live. I was stationed on the Connie [the aircraft carrier Constellation]. We were transiting from Hawaii to San Diego, coming off Westpac [six month long Western Pacific deployment]. I woke up that morning and put on a brand new pair of starched khakis. I was lookin' good. I walked into QA (Quality Assurance), which is where I worked, and everybody was watching the TV. And I was like, "What movie is this?" And one of the guys is like "This ain't no movie, this is real." And I was like "What are you talkin' about?" And so throughout the course of the day all the TVs were on and there was news coverage of the planes hitting the towers and hitting the Pentagon and crashing in Pennsylvania. It was a bitter day for us. There we were and there was our country being attacked. We wanted to do something. And I am changing my uniform from blue to khaki, ya know? I was getting pinned [the ceremony at which the newly selected chief receives the anchor collar devices of a chief]. But then you know we had all this chaos. Oh, and on top of everything else, we had tigers on board [civilian family members] and friends who have been selected to make the last leg of the deployment from Hawaii to San Diego with the ship]. So we had all these young kids and civilians on board and they are all watching us to see how we're reacting, like "What happens now?" And then they started asking questions. And I'm a brand new chief so now all of a sudden just because I

am wearing khaki I'm supposed to know something. And the guys in the shop are lookin' at me and asking, "What are we going to do Chief? What's America going to do?" And I am thinking "Damned if I know what the hell we're gonna do." And that's hard. They were expecting me to have some answers. We were supposed to come off cruise, but now the whole mission of the ship would change because of what was happening. The rumors started to fly. Stuff like, we're not pullin' into port, we're not gonna see our families, we're gonna load up and go out and fight. Ya know how it goes? But I'm thinkin', "Hell, we've got all these civilians on board we've got to do something with them." So we pulled into San Diego "darkened ship" [with no lights on]. And that was the first time that an aircraft carrier ever pulled into San Diego "darkened ship." It was eerie, this big ship, pullin' in like a huge shadow. And none of the families knew we were comin' because as soon as something like that happens they of course shut down all coms (communication) with the beach. We unloaded our tigers and started to load up our ordnance to go out again. But somehow the word got passed and some of the families started to arrive. So a lot of them came down to the ship. But we only stayed long enough to load our ordnance and then we went out again."

While most Americans who can remember the attack on the United States on September 11, 2001 would describe the events that happened that day as tragedies, the story Senior Chief Tracy told was not a tragedy, it was told as an epic. The events that took place on September 11, 2001 were described as "chaotic," they created dissonance in the life of the senior chief, he was struggling to make sense and give sense to those around him. Like many Americans on September 11, 2001, Senior Chief Tracy was experiencing a combination of emotions: confusion, pride, fear, anger, frustration and sadness. But perhaps unlike many Americans he believed he had an important part to play—a job to do that was a direct response to the attack and that helped him cope. The crew was not angry that they would need to go back out to sea and not see loved ones that they had not seen in six months. He implied that, despite the sacrifice entailed, they wanted to do something in response to the attacks. They wanted to fight back.

September 11, 2001, was not a typical day on the ship. It was not a typical day in the lives of Americans. The attack on the United States on September 11, 2001, was a seminal event that prompted similar personal stories in the rest of the group. Through sharing their "9/11" stories the members of the group made sense and gave sense. They affirmed their collective values as a group. They affirmed their belief that the mission of the Navy, and the ships they were on at the time, was courageous and noble. These stories prescribed schemas. They implied that when ordered to do so Navy people must trust, obey their commander and chief, and be ready to make personal sacrifices to answer a higher calling.

In the following story, Senior Chief Tim, an Aviation Boatswain mate, communicated the importance of the work that the Aviation Boatswain mates do to a group of young sailors on duty in the flight deck control compartment. The Aviation Boatswain mates who work on the flight deck are out on deck in all types of conditions; extreme heat and cold, rain and snow. They work in twelve-hour shifts. The work is physically demanding and dangerous. One wrong move while they are directing a plane can result in physical injury, loss of life, and the loss of multi-million dollar equipment. The average age of the crew members working the flight deck is 19. In the following story Senior Chief Tim referred to "stroking." Aviation Boatswain Mates who work on the flight deck on the aircraft carrier call the hand and arm signals they use to direct the aircraft "stroking." "Stroking" movements are standardized, international, signals. It is important to understand that although pilots fly the planes when they are in the air, once they are on the deck the pilots are guided by the Aviation Boatswain Mates assigned to direct the planes off the flight line and into a position where they can be moved below to the Hangar Bay; these Aviation Boatswain Mates are called "handlers."

Stroking on his Deathbed

Jack and I were really good buddies. We grew up on the flight deck together. We had some awesome times together. Anyway, for one reason or another we both left the Navy after our first enlistments. Jack got married. He and his wife were both from Iowa and he wanted to settle down there and start a family, the whole nine yards. His wife, Tiffany, was the real deal. Anyway, I ended up coming back into the Navy. I missed it. We kept in touch even though I was bouncing around the world. Sometimes I wouldn't talk to Jack for months at a time but then I would. Anyway, he got leukemia, and I didn't even know it. And one day I got a call from Tiffany and she told me Jack died. And she said she thought that I would want to know that he was talking to me on his deathbed. She said at times he was delirious and he kept saying my name and talking to me and he was "stroking." She said she thought I would want to know. Stroking on his deathbed was a tragic story but it does not describe a personal tragedy. Although Senior Chief Tim lost a dear friend he was not the victim in this story. Through telling this story Senior Chief Tim was making sense and giving sense to those who were listening to the story. He was explaining the decision he made to return to the Navy. The implication was that his friend Jack's work in the Navy was such an important part of his life, and his connections to it were so strong, that in his dying moments he was back on the flight deck with his friend "stroking." Through this story Senior Chief Tim was telling the young sailors in the room that they are in a special profession, so they should be proud of the special work that they do. He was communicating to the sailors who were listening to the story that they are part of something much bigger than themselves that is very special.

Senior Chief Tim was giving the sailors who heard the story something to sustain them on the days that they are so busy working that they are ready to drop from exhaustion, or the days that they are bored stiff because there are no planes flying. He was telling them that they should be willing to put up with the pain and hardship that comes with the job because they are part of a special profession—they are the "handlers"—and it is a profession that is so special that "Jack was stroking on his deathbed." Through this story, Senior Chief Tim was alleviating the boredom of the sailors on duty on a day when no planes were flying, thereby helping them cope. And he was giving them a story to help them appreciate the importance of what they do, thereby helping them navigate into the future. Dominant Narrative Five: "Don't take yourself too seriously "

The dominant narrative of "Don't take yourself too seriously" was often combined with the phrase "but take your work seriously." This dominant narrative was also characterized by two other phrases that were repeated frequently both at the Academy and on the Ship: "work hard, play hard" (Master Chief Cal, Master Chief Tom, Senior Chief Tim, Senior Chief Sam and Chief Brent), and "know your craft" (Senior Chief Dave, Senior Chief John and Master Chief Tom).

The following story is a humorous epic with a theme that both insiders and outsiders can understand. It contains elements of the dominant narratives "Growth through uncomfortability," "Take care of your people," "Trust...," and "Don't take yourself too seriously." This story was told by Master Chief Tom—one of the directors at the Academy. Master Chief Tom was a tall, Caucasian male in his 40s. His technical specialty was personnel administration.

Page 10's

It was 1981. I had just checked into my first duty station, the USS Forrestal [an aircraft carrier]. I was fresh out of A School [classroom training in a technical specialty that follows basic training]. I was young, energetic and scared to death. I knew how to get from my rack [bed] to the Personnel Office and to chow [meals] and that was it. I was afraid that if I went anywhere else on the ship I would get lost. I was working for this Master Chief—Master Chief Bell. I was just awed by him from the start. I had the opportunity to observe up close how much power and influence a Master Chief had—he was like a god—and I just thought, ya know, that's

what I want to be someday. So one of my first days there, he assigns me a pile of Page 10's [service record entries] to work on. And I really wanted to impress him. So I spent all morning working on those page 10's and they were perfect. I had them all ready for his signature. He was at chow, so I took those Page 10's and put them in a neat stack on his desk and then I went to chow, feeling really good. And when I came back from chow that stack of page 10's was back on my desk all nicely signed. And I was horrified because I didn't know what the hell to do with them. He obviously expected me to do something with them but I didn't know what. I had never gotten anything back before. They just taught us how to prepare them in A School, not what to do with them after that. So I was just sittin' there staring at that stack of page 10's, and finally Master Chief Bell comes out of his office and says to me, "You don't have a clue about what to do with those do you?" and I says "No, Master Chief, I am sorry to say that I don't. They didn't teach us that in A School." And he grumbles "God damn A school." Then he sighs and says "Well, come on shipmate, I'll show you what to do with them since God damn A School did such a piss poor job of training you." And he spent the next hour going through the training manual with me and showing me how to break them down and put them in the service records and all that jazz.

In "Page 10's" Master Chief Tom used self-deprecating humor to support the dominant narratives of "Growth through uncomfortability" and "Don't take yourself too seriously, but take your work seriously." This story has a bit of a romantic sub-text because Master Chief Tom described a hero, a mentor, someone he admired and wanted to emulate. In the discussion that followed this story Master Chief Tom said, "Although I only worked for him for a year, and that was almost 30 years ago, to this day when I am facing a problem I often ask myself, 'What would Larry Bell do?'" Master Chief Tom was saying that in a short period of time he accumulated a play list of narratives from working with one man whom he admired that would prescribe schemas that he would follow for the next 30 years. Several of the Chief Petty Officers (Senior Chief Dee, Master Chief Quin and Master Chief Joe) made similar comments about their mentors.

In "Page 10's" Master Chief Tom experienced a bit of discomfort but he learned from the incident. He showed his mentor that he wanted to do a good job and his mentor assessed him as trainable. He trusted his mentor to guide him in the right direction and his mentor trusted him to work hard and learn his job. There was mutual respect between a young Seaman Tom and his mentor. This schema of reciprocal respect and a willingness to do your job without complaining was a thematic thread in the stories of the Chief Petty Officers who participated in this study.

Thirty-two of the 129 stories analyzed for this study reflected the dominant narrative "Don't take yourself too seriously." Nine of the 14 participants at the Academy and 11 of the 20 participants on the Ship told stories that repeated this dominant narrative in some way. Roughly one quarter of the stories told both on the Ship and at the Academy reflected this dominant narrative. The following tables reflect the frequency of this dominant narrative.

Forty-nine of the stories collected for this study could be characterized as humorous in some way. Seventeen of the humorous stories could be classified as epic comedies because—like "AB or Wanna Be?"—they described tests and challenges the protagonist survived that, in retrospect, were humorous in some way. Humorous stories energized the group and they were cathartic; they served to relieve some tension in the group. Many of the stories were simply fun and told to entertain. The participants at times tried to out do each other with humorous stories. Many of the stories were like inside jokes, they were culture specific and would not be humorous to someone who did not understand the culture, but within the culture of the Navy they were hilarious. The stories that were inside jokes created a bond within the group, again reflecting shared values and membership in the storied space.

In some stories, or the antenarratives and dialogue that accompanied the stories, the dominant narrative of "Don't take yourself too seriously, but take your work seriously" reflected competing narratives; the narrative encouraged schemas of self deprecating humor and encouraged play, but it also assumed that members of the storied space know when the fun has gone too far, or when it is time to get back to work. This was especially the case when applied to the corollary of this narrative "work hard, play hard." In some of the stories "playing hard" was used to justify behavior that was perceived to be not in the best interest of the individual or the group. Some of the humorous stories collected for this study described the outrageous escapades of sailors on liberty that were not conducive to survival of the entity. The participants were clearly conflicted about the duality between working hard and playing hard, when playing hard for young sailors resulted in risky behavior.

Chief Brent, an Aviation Boatswain mate, told the following humorous epic that could have resulted in disaster, and could result in disciplinary action if it happened today. Chief Brent was a large Caucasian male in his late 30s with a boyish face, who towered over most of the sailors he supervised.

Big Papa in Waikiki

I was stationed at a H46 squadron [helicopter squadron]. We had just returned from deployment and we had done a particularly good job. Me and my LPO [leading petty officer] had busted our butts and it hadn't gone unnoticed. A couple of the lieutenants in the squadron told us that they wanted to show their appreciation so they took us out to Duke's in Waikiki. And they told us that the drinks were on them and we could order anything on the menu. So we proceeded to order everything on the menu—I mean everything. We ordered and proceeded to drink every single drink on the menu, from mai tai's to pina coladas, they kept buyin' em and we kept drinkin' em. I evidently made it through the entire drink menu. When I woke up I was layin' in the sand on the beach and my stomach was distended like a beach ball. My LPO, who was Jamaican, was sittin' there singin' and playin' the ukelele and there were these two little Hawaiian kids singin' and slappin' my stomach like bongos.

Chief Brent had quite a repertoire of outrageous drunken sailor stories to tell and evidently had quite a reputation for telling such stories. A couple of the Chief Petty Officers on the Ship seemed a bit uncomfortable that Chief Brent was participating in the study.

While Chief Brent told primarily one type of story his behavior contrasted with many of the other Chief Petty Officers on the Ship. He told me his stories over a cup of coffee in his office after touring the areas he was responsible for on the Ship to supervise work progress. Most of the coffee served in the offices of the Chief Petty Officers on the Ship was as murky as dark chocolate and it was served in mugs that looked like they had not been washed in a while, but Chief Brent's coffee was fresh and the mug sparkled. Chief Brent was listening to Mozart while most of the Chief Petty Officers on the Ship listened to rock or country music in their offices. Perhaps he had washed the china and put on a fresh pot of coffee because he was entertaining a guest or perhaps that was just Chief Brent's modus operandi.

In the discussions that followed Chief Brent's tales about his crazy antics he shared his own "Growth through uncomfortability" antenarrative that appeared to have informed his schemas. He pulled a photo out of his desk drawer of himself as a handsome young sailor and the home that he had purchased. He explained that after "pissing away five years (as a young sailor) and having nothing to show for it," he decided to start a savings allotment that the Navy matched; as a result he was able to buy a nice home and make several other wise investments that had paid off over the years.

Unfortunately, it is beyond the scope of this study to say what schemas Chief Brent's stories have inspired in the young sailors who have heard them. But it is likely that Chief Brent was telling the type of story that he thought was expected, that is to say stereotypical "sea stories" about the outrageous antics of sailors on liberty that are told for self-aggrandizement and to amuse others. Chief Brent certainly had plenty of those stories to tell. But it was obvious that he had adopted a complex blend of schemas to cope and survive. Many of the humorous stories collected for this study were told to entertain. They were cathartic and energizing. They added levity and helped people cope in the present. Most of the humorous stories that were told were like inside jokes; that is to say they would not be funny to those outside of the Navy. Such stories resulted in a bond between the teller and the audience and affirmed that the teller and the audience were part of the same storied space.

The following story, told by Master Chief Tom, is more humorous to insiders than outsiders, but even outsiders can appreciate its self-deprecating humor and ability to expose the sometimes absurd nature of the pomp and circumstance that surrounds formal ceremonial duties in the military. In this story Master Chief Tom referred to being a "side boy" in an "honor guard." Often in formal ceremonies onboard a ship two rows of five to ten sailors in dress uniform—called "side boys"—stand at the brow (walkway onto the ship) where dignitaries arrive. As a dignitary walks across the brow the ship's boatswain mate blows his pipe to announce their arrival and the side boys snap—in perfect unison to attention and render a sharp hand salute. They remain at attention, saluting, with their "eyes locked" (looking straight ahead) until the dignitary has passed between the side boys and has been escorted to the ceremonial area.

Dippy Sippy Donut Guy

I was on the USS Forrestal, and it was my first experience as a side boy in an honor guard. It was a nice day and we were having a Change of Command, which as you know is a huge deal for an aircraft carrier. I was proud to have been chosen to be a side boy and I was lookin' particularly sharp in my cracker jacks [sailor's dress uniform]. We were expecting all

these dignitaries—senators, admirals, generals, ambassadors of one sort or another—you know the drill. And the plan was that there would be a lieutenant stationed down the pier with a radio. And when the lieutenant saw a dignitary coming he would radio the guarterdeck so the bosun [boatswain mate] would know someone was approaching so we would be ready. We had done a couple of practices. And of course we were out there early all ready to go. So, all of a sudden the bosun [boatswain mate] blows his pipe, and I was thinking, wow the dignitaries are arriving early. And we snap to attention and render a sharp salute and I've got my eyes locked [looking straight ahead] just like I've been taught to do and out of the corner of my eye I see this guy in a white uniform walking up the brow and he is carrying something big and white and as he passes in front of me I see that it is this pimply faced teenager carrying these big white boxes. And we are all standing there at attention saluting him and the bosun is piping and the band is playing ruffles and flourishes and there is all this falderal. And it turns out he is the delivery boy from the Dippy Sippy Donut shop who has been sent over to deliver pastries for the reception. And we had just rendered him full honors as if he was an ambassador or something.

The participants loved sharing stories like "Dippy Sippy Donut Guy," and they had many such stories. The researcher knows from experience that humorous stories like "Dippy Sippy Donut Guy" are the kind of sea story that are often told over a beer in a bar on in another casual setting. They serve to bring people together. They are cathartic. They are fun. But they also reflect dominant narratives that inform the behavior of individuals and the group. Formal ceremonies and the attention to detail that is part of such ceremonies is serious business in the storied space of the Navy. A young sailor could get into big trouble for making a mistake as a side boy, which is why it was "an honor to be selected," yet as this story illustrated there was room for error, and that mistakes even help to relax the group and create a level of trust within the group.

Dominant Narrative Six: "Head on a swivel"

Twenty-eight of 129 stories reflected the dominant narrative "Head on a swivel." This is a common cautionary phrase used in the Navy. Sailors are told to "keep their heads on a swivel," meaning that they need to stay alert because they work in a dangerous environment in which the unexpected will happen.

The following epic story was told by Senior Chief Tim who also told "Stroking on his deathbed." It was about an accident on the flight deck of an aircraft carrier. Senior Chief Tim, a self described "fully pose-able GI Joe with kung fu moves," was a gregarious, muscular, Caucasian male in his 40s who always had an audience. He told the following story while standing on the flight deck of the Ship on a day when flight deck operations were not underway.

Kitty Hawk Mishap

It was a just another typical day at sea. The weather was good. Flight ops were underway. I was standing right about here on the flight deck with a couple of other guys when all of a sudden—BAM—this F-14 [jet] hit the deck. It didn't sound right—and of course things were happening really fast—but I remember seeing this incredible flash of orange out of the

corner of my eye. It took a second to register that the plane was on firein fact, the plane had split in two. So I call over my shoulder to the guys I was standing with ,"Let's go!" and I ran over the connectors for the fire fighting equipment. I could see fuel on the deck. And I go to pass it [the fire fighting equipment] over my shoulder to the guys who I thought were behind me and they weren't there—some people just freeze when something like that happens. Then I noticed the pilots had ejected but they weren't in the water. One of them was in the netting [the safety netting] that surrounds the flight deck]. He looked conscious and someone was running toward him so I figured they had him. Then I noticed the other pilot still in his seat pan [the seat of the aircraft that ejects with the pilot] with the chute [parachute] attached—he was not far from where I was. He was in pretty bad shape. He was shaking like he was in shock. His sleeves were rolled up—which is a "no, no"— and there was skin hanging off—it was pretty ugly. By that time a couple of other guys had come over to fight the fire so I ran over to the pilot lying on the deck to try to release him from the seat pan and parachute [the parachute is attached to the seat pan]. I tried to push the buttons to release the seat pan but my fingers are too big, I could not get them in the holes to push the buttons that release the pan. So I am hanging on to the guy and the seat pan and the chute starts to inflate and now we are both being dragged down the deck at a pretty good clip as the chute starts to inflate. At that point I figured I would just hang on to the guy and we would go into the water together.

We both had our floatation gear on so I thought at least if I stuck with him I could keep us both afloat. So there we were moving down the deck pretty fast now. My pants were ripped off as I scrapped along the non skid [the deck of the ship that is like heavy grade sand paper] and my bare ass was hanging out and scrapping along the deck. It wasn't pretty. We were real close to the edge and I thought this is it, we're going into the water, when one of the flight crew came running out, reaches into the pilot's flight suit, pulls out the pilot's safety knife and cuts the lines [ropes] on the chute just as we were about to be dragged off the deck. Luckily he knew where the pilots keep their safety knives.

Both Senior Chief Tim, and the pilot he was clinging to, survived to tell this story. Very few people survive the fall of approximately five stories from the flight deck of an aircraft carrier. If Senior Chief Tim had not survived, the story would have been a tragedy. Senior Chief Tim used "Kitty Hawk Mishap" to make sense. He and the organization have used the story of this incident, captured on video, to train others. Senior Chief Tim was a hero in the eyes of people who worked for him—several of the sailors who work for him urged him to tell this story.

The story "Kitty Hawk Mishap" seemed to support the dominant narratives of "Head on a swivel" and "Take care of your people." Senior Chief Tim very easily could have been killed along with the pilot if they had been pulled off the deck of the ship. The partially inflated parachute might have slowed their descent into the water, but it also could have become tangled in the superstructure of the ship and functioned like a tether, dragging them along in the wake of the fast moving ship or slamming them into the side of the ship. Senior Chief Tim's actions were not in his best interests as an individual—he could have been killed—his actions do underscore the dominant narrative of "Take care of your people." Senior Chief Tim was conditioned to take care of one of his shipmates a pilot whom he did not even know—who was part of the larger storied space of the ship and the Navy. Senior Chief Tim was acting in the best interest of the larger complex adaptive system.

The dominant narrative of "Head on a swivel" also reflected the theme that change is inevitable so remain nimble. All but four of the 14 participants at the Academy and half of the 20 Chief Petty Officers on the Ship repeated this dominant narrative. Roughly one fifth of the stories contained the dominant narrative "Head on a swivel"; it was reflected in other phrases such as "Nothing ever happens exactly as planned" (Master Chief Mike), "The one thing that is certain is change" (Senior Chief Dee), "Prepare to be surprised" (Senior Chief Shane), "Stay flexible" (Chief Bryant), and "Change is inevitable" (Senior Chief Pay and Master Chief Quin).

Twenty-two of the stories collected for this study, like "Kitty Hawk Mishap," were accounts of accidents, called "mishaps" in the Navy. The protagonist or the characters in all of the mishap stories had to deal with the unexpected, or chaotic situations of some kind. Some of the stories collected for this study were about terrifying experiences.

Many of the stories that reflected the dominant narrative of "Head on a swivel" were about how the protagonists, or other characters in the stories, made sense of, and coped with, surprise and the unexpected. Some of the stories simply prescribed how to adapt to inevitable change. In the following story, Senior Chief Dee described another

one of her mentors, "a crusty old master chief" who was attempting to adapt to a changing Navy.

Master Chief PT's in khakis

Master Chief Cline was a crusty old master chief, but in many ways he was not like the other chiefs. In those days chiefs were out of sight out of mind-they let the LPO [Leading Petty Officer] do everything. But Master Chief Cline was not like that. He was always doing stuff for us, and takin' care of us. It was hard to get a car in those days so he was always driving us where we needed to go. He would organize division parties and pick everyone up and take everyone home. He would drive you to the airport if you needed a ride. Like a lot of chiefs in those days he smoked like a chimney and he was always holding a coffee cup that looked like it hadn't been washed in years. And if someone tried to wash it there was hell to pay— he said the crust gave the coffee better flavor. So one day we were scheduled to do our PT test [annual physical training] test] and we were all out by the gym in our PT gear and the master chief shows up in his khakis and we were like "Master Chief where are your sneakers, where is your PT gear?" And he was like, "The Navy didn't issue me no God damn PT gear in my seabag." And so he did the run and the push-ups and sit ups and the whole nine yards in his khakis and work boots. He was huffin' and puffin' and beet red when he finished but he passed. And as soon as he finished he pulled out a pack of Camels and lit up.

The beloved "crusty old master chief" was "sucking it up" and adapting to a changing Navy in his passive aggressive way. Senior Chief Dee described him as unlike other Chief Petty Officers at the time because he went out of his way to personally "take care of his people," but he was not embracing the new policies of the Navy with respect to physical fitness standards. He was mocking the policy through his refusal to wear athletic gear with the retort "the Navy didn't issue me no goddamn PT gear in my seabag."

Both Senior Chief Dee and Master Chief Quin described a Navy that had changed its policies and attitudes toward women since they were young sailors. Both of them said that they did not like the term "a man's world," even though the Navy is still only one fifth female. Senior Chief Dee said,

The guys who thought a ship was no place for a woman are gone. They were dinosaurs. That kind of attitude is not tolerated and the Navy can do that—zero tolerance—if you act sexist or racist you are gone.

One day, while crossing the hanger bay, Master Chief Quin and the researcher observed a petite young female seaman in coveralls driving a small tractor with a huge airplane called a "rhino" in tow. As the young seaman adeptly maneuvered the "rhino" into an incredibly tight parking space the researcher commented that she never thought she would see women doing this type of work on an aircraft carrier. Master Chief Quin replied, "Yeah. I know what you mean, but you've got to remember that this is the only world these kids will know—they will not have memories of the time when women did not do these things." Senior Chief Pay, a Hispanic male in his 40s, who was the Boatswain Mate in charge of the Deck Department, reflected upon how the Navy had changed since he joined,

When I was a young sailor if you told the chief that you needed time off because your wife or kid had a problem, the typical response was "If the Navy wanted you to have a wife they would have issued you one in your goddamn sea bag!" But those days are gone. There was still a lot of racist shit going on when I joined. Somebody would call someone a name and there would be a fight that would turn into a small riot. And of course there were no women on ships. Now I've got more women in the Deck Department than men—it's hard to believe. But, ya know, it works. It's not like you don't have any problems with female sailors—they are just different problems. The guys go out and get drunk and don't show up for work, or they get into fights and after a couple of incidents they get kicked out so you got to deal with that. The women have other problems-like they turn up pregnant and then we lose them—that's a problem. We always seem to be losing people for one reason or another. It's a problem but you just gotta deal with it.

Dominant Narrative Seven: "Some stories should not be told" There was one additional dominant narrative—"Some stories should not be told"—that was observed, and alluded to, repeatedly through comments and reactions on both the Ship and at the Academy. This dominant narrative was not frequently repeated

in the actual stories the participants told; rather it was an antenarrative of sorts, that was present in attitudes, demeanor and dialogue both on the Ship and at the Academy.

One of the Chief Petty Officers on the Ship openly addressed this dominant narrative. He did not volunteer for an interview or a shadowing session but he approached me to voice his concerns one day as I was leaving the Chiefs' Mess after lunch. He said,

I just think that some of these so-called sea stories should not be told. They are dangerous. They send the wrong message. Some of these guys [chiefs] tell stories about things that they did back in the day, in places like Olongapo (Philippines) or Mombasa (Kenya), and I don't even know if half that shit is true but it sends the wrong message. These kids hear these stories and they go down to TJ [Tijuana, Mexico] and try to do the same thing and they get into trouble.

Another female chief at the Academy hinted at a similar concern. Although roughly ten percent of the Chief Petty Officers at the Academy were female, initially there were no female volunteers for the group interview sessions. I was puzzled by why women were not volunteering for the group interviews, so on a coffee break I approached one of the female Chief Petty Officers who was a particularly vocal participant in class discussions, and asked her why she did not seem to want to participate in the group interviews. She replied with a nervous laugh, "Who me? I don't have any stories." Then the female chief rolled her eyes, pointed to a group of male Chief Petty Officers engaged in animated conversation across the room, and said, "Those guys are the ones with the stories, not me." Another female senior chief at the Academy, a staff member, reacted the same way when I approached her in the staff lounge. She laughed nervously and said, "I don't have any stories." To which I replied, "Come on Senior Chief, you've been in the Navy longer than I was and I have stories, I know you have stories." She just smiled, demurred, and changed the subject.

The initial letters of inquiry to the Academy and ships went unanswered. However, when they were followed up with phone calls and face-to-face meetings with the heads of the organizations the response was positive. Participation at both the Academy and on the Ship was slow initially, but once one or two volunteers agreed to an interview plenty of volunteers followed and eventually there were more volunteers than could adequately be accommodated.

There were likely a number of reasons for the reactions described above. The researcher, a retired commissioned officer, while familiar with the Navy, was not a part of the storied space of the Chiefs' Mess and never had been; therefore she needed to earn the trust of the participants before they would engage with her. The purpose of the study was probably poorly understood, or not sufficiently understood initially, by some who were put off by the term "sea story." To some Navy members the term "sea story" brought to mind stereotypical stories about the wild escapades that sailors share to bolster their egos. "Sea stories" were seen as synonymous with tall tales. Many members of the Navy approached for the study, not unlike members of many other large bureaucratic organizations accustomed to quantitative research based on scientific methods that are positivist and linear, had a hard time accepting the notion that story analysis could yield legitimate insights. But many of those who participated in the study, or gave their permission for the research, were able to stretch their understanding of the word "story"

to see the potential value of the study and they became intrigued. Some immediately grasped the purpose and value of the study and others came around to the idea after entering into a narrative and antenarrative discussion with the researcher. Once the individuals who were centers of influence, or key nodes in a communication web, assessed the study as low risk and potentially beneficial, many others came around to the idea; but some remained skeptical.

Individuals who were open to the notion of participating in the study were open to modifying their dominant narratives and schemas regarding "sea stories" and the use of story in general. Others could not, or did not want to, modify their dominant narratives regarding "sea stories," so they chose not to participate. The result was that some potential participants were enthusiastic for a variety of reasons, some were understandably cautious, and some were simply not interested.

Evidence was Found of Other Complexity Science Principles

The theories of Baskin (2008) and Boje (2001) incorporated the aspects of both narrative theory and complexity theory that yielded the greatest insights into how and why stories were working the way they were for the participants in this study. But once the participants were viewed as a storied space—akin to complex adaptive entities—with dominant narratives and attendant schemas, the complexity science principles distilled by others—especially those who have also applied complexity science principles to their analysis of human social systems and organizations—emerged.

Fractals

Baskin (2008) suggested that "storied spaces" (p. 1) could be viewed as complex adaptive entities. The Chiefs' Mess, at the Academy and on the Ship, could be viewed as

storied spaces, and thus complex adaptive entities. They in turn could be viewed as part of the larger storied space of the Chiefs' Mess in the Navy that includes all of the Chiefs' Messes located at different organizations throughout the Navy. The Navy Chiefs' Mess could be viewed as a part of the storied space of the Navy, and the Navy in turn could be viewed as part of the storied space of the United States military.

Other authors have identified sub-cultures within dominant cultures, most notably Schein (1983, 1985, 1990) who pioneered research into organizational culture. But the concept of "storied spaces" describes the fluid and dynamic nature of a grouping and its relationship with its environment more completely than the concept of organizational culture and sub-cultures does.

Likewise, individual Chief Petty Officers could be viewed as part of other storied spaces. For example, in addition to being part of the storied space of the Ship, the Chief Petty Officers on the Ship were part of the storied spaces of their divisions and departments. They were also part of the storied spaces of their families and their communities off the Ship. In this way the storied spaces that the participants in this study occupied displayed a fractal quality (Mandlebrot, 1982). That is to say, the storied spaces were nested within one another and echoed principles that the people who occupied them used to define their world and how to respond to it. They were not necessarily mirrored images of each other but they did exhibit similar qualities as the individuals and the storied spaces adapted to external changes that were ongoing. Baskin (2008) explained that membership in a storied space as follows,

Membership in a storied space depends on the acceptance of negotiated stories by which each grouping defines the nature of the world and how people in the group must respond to prosper. Each such storied space affects its members' behavior through an interplay between its historically grounded dominant narrative...and the antenarrative stories people in it tell as they try to cope with emerging phenomenon. (Baskin, 2008, p. 1)

Double Loop Learning and Energy Exchange

The Chief Petty Officers on the Ship through the narratives and antenarratives already discussed were constantly negotiating agreed upon dominant narratives that would prescribe ways of responding to their environments. The storied spaces that the Chief Petty Officers occupied were like complex adaptive entities (Bloch, 2005; Bloch, et al., 2007; Gell-Mann, 1994; Kauffman, 1995; Stacey, 1996; Stackman et al., 2006; Waldrop, 1992) because through the interplay of narrative and antenarrative there was an open and ongoing flow of energy.

For example, when Master Chief Cal repeated the dominant narrative of "Growth through uncomfortability" he was expressing his belief that mistakes are acceptable if people learn from them. Gell-Mann (1994) described this as the "capacity to learn from experience" (p. 19). Other Chief Petty Officers on the Ship, and at the Academy, echoed the dominant narrative of "Growth through uncomfortability" in their stories even though they were separated by a continent from Master Chief Cal, or occupied other stories spaces. There were no Navy directives that prescribed "Growth through uncomfortability," "Take care of your people," "Suck it up," "Trust," "Don't take yourself too seriously," or "Head on a swivel," yet they were widely held dominant narratives.

The belief that mistakes are acceptable if the entity learns from them reflected another quality of complex adaptable systems identified by Gell-Mann (1994) in biological systems. It has also been identified by a number of other researchers who have contrasted single loop learning with double loop learning in organizations, most notably those who experimented with collaborative change processes in organizations such as Schein (Schein & Bennis, 1965), Argyris (1990; Argyris, Putnam, & Smith, 1985; Argyris & Schon, 1978) and Stacey (1996).

Stacey (1996), who has also applied complexity science theory to his work with organizations said, "double-loop learning is the change of dominant schema…resulting in innovation and creativity (p. 287)." In the context of story, double-loop learning results when individuals or groups through the interplay of narrative and antenarrative are open to modifying a dominant narrative that no longer prescribes behavior that best suits the external environment. In "Master Chief PT's," Senior Chief Dee described a "crusty old master chief" who was having a difficult time adapting to a healthier, new Navy that discouraged smoking and required all to pass an annual physical training test.

Autopoesis

Complex adaptive entities are self-organizing. They adapt internally to changing external environments through autopoesis (Maturana & Varela, 1987). Baskin (2008) explained that stories "enable us to reduce, internally, the complexity of the world around us in order to understand it enough to choose appropriate actions" (p. 2). Baskin (2008) said, "internal storying appears to be pre-conscious" (p. 3). As individuals, humans order their thoughts through narrative, perhaps even pre-consciously, and through antenarrative they give voice to conscious and pre-conscious thoughts and negotiate a shared view of

reality with others in their storied spaces, thereby making sense of a complex environment and prescribing ways of behaving that enable them to cope in the present and adapt to the future.

Master Chief Cal and the other Chief Petty Officers who participated in this study were constantly testing the adaptability of dominant narratives, and their attendant schemas, through antenarrative, to see if they were a good fit with a changing and emerging environment. Master Chief Quin said that the Navy environment, and attitudes toward women at sea, had changed since she was a young sailor. She observed that women today are working everywhere on the aircraft carrier and that the men who cannot accept women in a sea duty environment "are dinosaurs," they "need to go." She said "this is the only world these kids will know," they will not remember a time when women were not on aircraft carriers—they will not have stories to tell about those times and how the storied space of the Ship adapted to the change.

Boje (2001) and Baskin (2008) suggested that dominant narratives are constantly being tested by individuals and by groups through the interplay of narrative and antenarrative. The findings of this study supported that claim. Boje (2001) explained that antenarratives sometimes reflect dualities, inconsistencies, and what he calls "microstoria"—stories that conflict with a "grande narrative" (p. 45). Through the interplay of narrative and antenarrative self-organizing takes place. Antenarratives sometimes contain the seed of a new narrative that is in the process of forming. Antenarratives can result in a mutation of a dominant narrative or a whole new dominant narrative, as the dominant narrative and the antenarrative compete to find an appropriate fit with the environment.

Master Chief Cal reflected dualities, and the emergence of modified dominant narratives, in his stories and antenarrative musings. He said that mistakes are acceptable and a good way to learn-indeed, he said "ass chewin's" are a free lesson- but he also said that some mistakes are unacceptable. Master Chief Cal explained that when the sailors are on deck he wants them to be able to focus on their work. He said that he does not want them to be distracted by worry about a sick family member or pay problems. He said it is the Chief Petty Officers' job to take care of those problems so that the sailors can focus. But Master Chief Cal, and other Chief Petty Officers in this study, also said that they expect sailors to do what they are told and "Suck it up." Master Chief Jeff said, "We coddle these kids too much now-a-days." Master Chief Pay said that Chief Petty Officers no longer say things such as, "If the Navy wanted you to have a wife, they would have issued you one in your sea bag." The comments of Master Chief Cal, Master Chief Pay and Master Chief Jeff are evidence of duality. Through their stories and antenarratives the members of the storied space of the Chiefs' Mess were negotiating a balance between "Taking care of your people" and expecting sailors to "Suck it up." They were self organizing. There dominant narratives were evolving.

Networks

The Navy is a classically organized command and control organization, but nonlinear dynamics were evident in the networking of the participants and the network of the Chiefs' Mess. The Navy Chiefs' Mess is not an officially sanctioned network, yet the Chief Petty Officers repeatedly referred to getting work done "in the Chiefs' Mess" or "through the Chiefs' Mess." The stories about Charge Books, references to the Chief Petty Officers initiation, and multiple references to taking care of one's brothers or sisters "in the Mess" were evidence of the strong network of the Chiefs' Mess.

The process of initiating Chief Petty Officers into the "brotherhood of Chief Petty Officers" (United States Navy Chief Petty Officers Creed) is evidence of the bond that crosses organizational lines to coalesce Chief Petty Officers as a storied space. The initiation—a hybrid of a professional and social fraternity initiation—is a ritual that takes place at approximately the same time each year throughout the Navy. The initiation includes tests of will, a mock trial, and finally a formal ceremony at which the new initiates wear their khaki uniforms for the first time—signifying their promotion to Chief Petty Officer. Senior Chief Tracy referred to the importance of the Chief Petty Officers' Initiation in "9/11 on the Connie." Senior Chief Dee explained the importance of the network of the Chiefs' Mess in the following discussion.

It (the Navy Chiefs' Mess) is a network you can tap into. If you have a question or you need something you start with your own Chiefs' Mess but if you can't find the answer there, or get what you need, you reach out to the rest. For example when I was in Bahrain, the Chiefs' Mess on my ship was small but we had 350 Chiefs in the Mess throughout Bahrain that you could tap into if you needed something. You could send out an e-mail and say "Does anybody have thus and such?" and nine times out of ten one of your brothers or sisters in the Mess would be able to help you out or know someone who could.

Master Chief Cal said that he gets most of his work done "in the Mess" on the Ship. Master Chief Cal was referring to the physical space on the Ship where the Chief Petty Officers eat their meals, but he was also referring to the network of the Chiefs' Mess on the Ship and beyond. Master Chief Cal's references in his stories and antenarratives to the network of the Chiefs' Mess, and the references of other Chief Petty Officers to the Chiefs' Mess, were evidence of a strong network that defines a storied space. The participants' belief in the Chiefs' Mess as a closely knit and ever widening network of support reflects the complexity principle of networks (Barabasi, 2002) that enable successful complex adaptive systems to survive. Master Chief Joe, the master chief in the Engineering Department on the Ship, called the Chiefs' Mess "the glue" that holds the Navy together. Many of the other Chief Petty Officers sampled in this study reflected similar sentiments.

Master Chief Tully, one of the aviation logistics specialists on the Ship, cited the tradition of the "charge book" as an example of the wide-ranging network of the Chiefs' Mess. Each newly selected Chief Petty Officer is tasked with creating a charge book during their first year as a chief. They are "charged" with getting other, more experienced, Chief Petty Officers, to make entries in their charge book. Master Chief Tully proudly displayed his charge book on his desk. It was a three-inch thick tome with an elaborately carved wooden cover and leather straps. It looked like a family bible. Master Chief Tully's Charge Book contained: advice, words of wisdom, taskings, lessons, drawings, and anecdotes. The entries in the charge book reflected dominant narratives and prescribed schemas.

Furthermore, Chief Petty Officers represent the collective knowledge, in an organization where the average member is 19 years old. As the most technically experienced individuals on a ship the Chief Petty Officers function as nodes in webs,

training young sailors as well as young junior officers fresh out of college who are formally their superiors in the chain of command. Commissioned officers may have advanced degrees and the academic sophistication that comes with such degrees, but they do not have the day-to-day practical, technical experience of the Chief Petty Officers. Chief Petty Officers have learned from experience and they are uniquely positioned to make connections between abstract knowledge and complex real world situations. *Phase Transitions, Fitness Peaks and Dissipative Structures*

The complexity principles of phase transitions—the dynamic processes between order and chaos that provide the opportunity for creativity and emergence (Barabasi, 2002; Baskin, 2008; Bloch, et al., 2007; Kauffman, 1995; Stacey, 1996), and fitness peaks—complex adaptive systems seeking adaptation to their environments during phase transitions (Kauffman, 1995), were evident in the dominant narratives already discussed in this paper. There was evidence of phase transitions within the stories told as well as in the dialogue and antenarrative surrounding the stories as the participants negotiated schemas (Gell-Mann, 1994)—ways or responding—to their environments.

The environment on the Ship and at the Academy allowed for creativity as the Chief Petty Officers, through the interplay of narrative and antenarrative, tested and modified schemas to suit changing environments, such as the assimilation of women on ships, and "zero tolerance" policies for drug use. Fitness peaks (Kauffman, 1995) were evident when the participants found ways for competing dominant narratives to co-exist at the same time. Fitness peaks and phase transitions were also evident when participants described changes in dominant narratives. Master Chief Quin described Chief Petty Officers who could not adapt to women on sea duty as "dinosaurs," and Senior Chief Pay said that gone are the days when a chief would respond to a sailor's request for time off to attend to family problems with the retort, "If the Navy wanted you to have a wife they would have issued you one in your sea bag."

The complexity principles of phase transitions and fitness peaks were also present in the dominant narrative "Some stories should not be told." Dissonance, chaos and lack of control are inherent in phase transitions (Barabasi, 2002; Baskin, 2008; Stacey, 1996, 2000). Lack of control results in some discomfort. Some members of the storied spaces at the Academy and on the Ship were obviously uncomfortable with their inability to control stories. Master Chief Cal and Senior Chief Tray referred to "controlling behavior" and how it was easier to "control sailors" behavior" when the Ship was at sea. Master Chief Cal was expressing frustration that the behavior of the young sailors was beyond his control. The Chief Petty Officers who said, or implied that "Some stories should not be told," were uncomfortable with their lack of control over the behavior that stories might inspire or the negative image of the organization that the stories might project.

Stacey (1996), in his application of complexity science principles to organization studies, explored the tendency of organizations to want to remain in control of the actions of their members. Stacey (1996) distinguished between behavior that is controlled and people who are in control,

For people to be in control they must be able to specify desired outcomes and identify actions that are likely to produce those outcomes, and then be able to employ negative feedback to keep actual outcomes close to desired ones. People can therefore only be in control in rather limited circumstances. (p. 286) Stacey was confirming the discomfort reflected in the dominant narrative "Some stories should not be told"—indeed, the behavior that stories inspire is difficult to control. The Chief Petty Officers, who are expected to influence the behavior of young sailors, were struggling with their inability to control their subordinates' behavior especially when the sailors were not contained on the Ship. The Chief Petty Officers who were concerned about the image that some stories might project could not control the stories or the images—not in a storied space that was part of a larger storied space that valued free speech.

Attractors

There was ample evidence that stories functioned as attractors for the individuals who told them and heard them. Some attractors limit change and growth while others— "strange attractors"—enhance growth (Bloch, et al., 2007; Kauffman, 1995). There was evidence that stories sometimes functioned like limiting attractors that prevented the emergence and growth of individuals or the group. But there was also evidence that stories functioned like strange attractors enhancing the success and survivability of the individual or the group.

Stories such as "New Chief Brings Hope" or "Master Chief Cal's Story," functioned as attractors—enabling their protagonists to break from stagnant or destructive patterns and develop new schemas that enabled adaptability. Some stories, such as "We're Gonna Ace It," or "What Happened Dude," described schemas that had inhibited emergence, and prescribed schemas to enhance emergence.

The story "We're Gonna Ace It" told by Master Chief Arcelo is an example of a story that functioned as an attractor (Bloch, et al., 2007; Kauffman, 1995) for the

Aviation Maintenance Department. The department was stuck in a story that was a limiting attractor. The story implied that they were "no good," they had "failed," they were a "black mark" on the rest of the organization. The department was living a negative, maladaptive story. Stuck in the negative story—they were convinced that they would fail again. Master Chief Arcelo came into the storied space of the organization with a new story. He told them he had never failed an Aviation Maintenance Inspection and he "was not about to start now." His new story energized the group and enabled them to adopt the schemas they needed to succeed; it gave the storied space of the Aviation Maintenance Department hope and they ultimately "aced it."

Spirituality and Unity

Finally there was evidence of unity (Bloch, et al., 2007) and interconnectedness among the Navy Chief Petty Officers in this study. There was evidence of altruism and, as Senior Chief Jerry said, "a commitment to something bigger than yourself." Unity seemed to inform behavior in many ways. It seemed to make people ungrudgingly willing to "suck it up." It seemed to inspire altruism even when "taking care of your people" required personal sacrifice or the people being taken care of were strangers. And it seemed to inspire "trust..."; that is to say, trust in something "bigger" than the individual. This dominant narrative underscored the principle that Gell-Mann (1994) referred to as "political unity" or patriotism and the spirituality and interconnectedness that Bloch, Henderson and Stackman (2007) found in social inquiry groups.

Gell-Mann (1994) addressed the complex, adaptive aspects of "altruistic behavior" and "political unity" (p. 360), explaining that while protecting others, such as family members and even extended family members, makes evolutionary biological sense, protecting others beyond family also may also make sense for humans. Gell-Mann (1994) said,

Sociobiologists now agree that patterns of altruistic behavior in humans are greatly affected by culture. A certain willingness to risk one's life for another human being can easily extend to all members of one's tribe . . . on the scale of a nation state, it is known as patriotism. As people have aggregated into larger and larger societies the concept of 'us' has tended to grow in scope. (p. 360)

Gell-Mann (1994) went on to say, "community is essential to human activity, but only communities motivated to work together are likely to be adaptive in the world of the future" (p. 361).

The storied spaces of Ship, the Chiefs' Mess and the Navy displayed evidence of community in the dominant narrative "Take care of your people." People in the storied spaces studied were conditioned to take care of one another. Some stories, like "Kitty Hawk Mishap" described altruistic behavior. Other stories like "9/11 on the Connie" described a willingness to subjugate personal needs to the needs of the group.

It is not known if Senior Chief Tim had thoughts of heroism when he risked his life in an attempt to save the injured pilot who was being dragged down the flight deck of the ship, but it is known that he had very little time to think about much at all. Yet, he was experienced enough to know that people often do not survive the fall from the flight deck of the carrier. There are many stories about acts of heroism in the storied spaces of the military and the Navy. Complexity theory provides an explanation for such behavior. That is to say, stories and dominant narratives served to condition members of storied spaces to at times act altruistically and heroically because they communicated to members that they were part of something more important than their own, individual well being.

What Was Not Found

Some expected findings were not found. Before each class at the Academy the Chief Petty Officers recited the Sailor's Creed. Every Navy recruit is given a copy of the Sailor's Creed and is required to commit it to memory. The Sailor's Creed supposedly embodies the essence of what it means to be a sailor. It is as follows:

I am a United States Sailor. I will support and defend the Constitution of the United States of America and I will obey the orders of those appointed over me. I represent the fighting spirit of the Navy and all who have gone before me to defend freedom and democracy around the world. I proudly serve my country's Navy combat team with Honor, Courage and Commitment. I am committed to excellence and the fair treatment of all. (Chief of Naval Operations Blue Ribbon Panel, 1993)

The words "Honor, Courage and Commitment" were emblazoned on everything from posters to mission statements at the Academy and on the Ship. Stories about honor, courage and commitment were expected, but rarely were the actual words "honor", "courage" and "commitment" used in the stories, and those three words were never used together in any of the stories collected for this study. When the participants were asked what was meant by the words "Honor, Courage and Commitment," the Chief Petty Officers—who otherwise were never at a loss for words—were mute. Yet they told many stories that contained examples of honor, courage and commitment. Senior Chief Tim displayed courage in "Kitty Hawk Mishap." Master Chief Tom displayed commitment in "Page 10's." Senior Chief Sam displayed honor in "AB or Wanna Be?" But they never used the actual words "honor, courage and commitment" in their stories.

An overarching need for humility is emphasized in The Chief Petty Officers' Creed that is seared into the brains of all Chief Petty Officers the day that they are initiated into the brotherhood of Chief Petty Officers. In fact, as the following excerpt from The Chief Petty Officers' Creed illustrates, the Chief Petty Officers' initiation is designed to be a lesson in humility.

You were subjected [during the initiation] to humiliation to prove to you that humility is good and great, a necessary attribute which cannot mar you, and in fact strengthens you you will be caused to suffer indignities, to experience humiliation [in the future] far beyond those imposed upon you today. Bear them with the dignity and with the same good grace which you bore them today! (Navy Advancement Study Guide, 1998)

The excerpt from the Chief Petty Officers' Creed cited above reflects the dominant narratives of "Growth through uncomfortability," "Suck it up," "Don't take yourself too seriously," and "trust..." found in many of the stories collected for this study. But none of the participants used the words "humility" or "humiliation" in the stories they shared, or in the discussions that accompanied the stories; and while the participants told many stories that involved self-deprecating humor, none of the stories told were about strictly humiliating experiences. The stories about potentially humiliating experiences were told as epics, reflecting the protagonist's ability to endure, or perhaps "suck it up."

Summary of the Findings

There was evidence that the participants who shared stories for this study used stories to make sense, give sense, cope and prescribe actions that were then used to guide future actions. Many stories accomplished all three functions—sense making and giving, coping and navigating into the future—simultaneously, or they could be used to accomplish all three functions. Therefore, analyzing the narratives using the first three research questions was not very useful initially, especially given the large amount of data to be analyzed. In contrast, viewing the stories collected through a complexity science lens—especially using Baskin's (2008) theory of storied spaces and dominant narratives, and Boje's (2001) theory of antenarrative—resulted in a breakthrough that led to insights into how and why stories were working the way they were for the people who told them and heard them.

When the people telling the stories were viewed as a "storied space," themes began to emerge from the stories they told that reflected dominant narratives, which in turn prescribed schemas for the participants' actions and the actions of others in their environments. Different participants, in different locations, at different times, repeated the dominant narratives. The dominant narratives at times prescribed schemas that were contradictory, but when dissonance occurred there was evidence that the participants attempted to modify or change schemas to better adapt to their environments.

Once the participants in the study were viewed as a "storied space" with dominant narratives, other principles of complexity principles could be applied to the data that

uncovered insights into how and why stories were functioning the way they were for the people who told them and heard them. It was obvious that the Chief Petty Officers who participated in the study were skilled at functioning in networks that reached within and across organizations as well as up and down chains of command. Their dominant narratives mimicked the narratives of the larger storied space of the Navy in an autopoietic fashion. There was evidence that their narratives functioned as attractors and that they engaged in double loop learning. There was ample evidence that the participants used stories—as well as the antenarratives that accompanied the stories—to negotiate individual and collective views of reality that in turn influenced behavior and adaptation to internal and external environments, similar to the ways that complex adaptive entities use schemas to adapt to their environments.

There was evidence that the terms "sea stories," "story" and "narrative" held different meanings for different individuals approached to participate in the study. And there was evidence that some individuals modified their understanding of those terms in the course of the study, becoming more open to participation, the purpose of the study, and the potential benefits of the study.

Some findings of the study were expected but some were not. It was expected that the participants would use stories to make sense, give sense and cope. It was expected that individuals and organizations approached to participate in the study would be enthused once they understood the purpose of the study and some were; but the high level of initial reluctance of individuals to participate after the study had been approved was unexpected—especially at the Academy. Also, the array of dissonance that the dominant narratives presented to the participants was greater than expected, and the testing of schemas through narrative and antenarrative was greater than expected—this finding supported the complex and adaptive nature of storied spaces being studied.

A more in depth discussion of the findings, possible implications and recommendations follows in Chapter V.

CHAPTER V

DISCUSSION, IMPLICATIONS, RECOMMENDATIONS, CONCLUSIONS

Man is a teller of stories, he lives surrounded by his own stories and those of other people, he sees everything that happens to him in terms of these stories and he tries to live his life as if he were recounting it. (Jean-Paul Sartre, *The Words*)

Discussion

Stories and Poetic Modes

Classifying stories by poetic modes was a good way to begin the analysis of the large number of stories collected for this study. Patterns and themes emerged as the stories were classified into four primary poetic modes—epics, tragedies, comedies and romances—and hybrid combinations of those poetic modes such as epic-comedies or tragic-comedies.

The majority of stories collected for this study—such as "Master Chief Cal's story" or "9/11 on the Connie" were classified as epics. When the epic mode was combined with epic hybrids over half the stories could be classified as strongly epic. This finding is consonant with the findings of Gabriel (2000), and Peters and Waterman (1982), who also identified poetic modes in the organizational stories that they collected, and classified most of the organizational stories that they collected as epics.

Gabriel (2000) explained that the bulk of organizational stories fall into the epic mode because epic stories are entertaining and safe to tell an outsider. Gabriel said,

The emotional content of epic stories is quite distinct from those of comic and tragic. They invariably generate pride and admiration. They also generate commitment and even a sense of duty to emulate the hero or maintain the tradition. (p. 74)

The stories with strongly tragic elements—29 as compared to 72 epic stories were not about the storyteller's personal tragedies, they were stories about the misfortunes of others or accidents—called mishaps in the Navy. "Remember the Stark" and "Stroking on his deathbed" are examples of tragic stories that reflected the misfortune of others. This finding was also consonant with Gabriel's (2000) findings. Gabriel (2000) said that storytellers are often uncomfortable sharing stories about personal tragedies with someone they do not know well because of the intimate emotions that such stories evoke such as "sadness, sorrow, pity, fear or anger" (p. 84).

The 51 stories with comic elements that were collected for this study were often cathartic and served to energize the group. Some of the comic stories even increased tension. This finding was consonant with Gabriel's (2000) finding that humorous stories often function to release tension, but can also serve to increase tension. Like the stories collected by Gabriel, many of the humorous stories collected for this study were self-deprecating or they had a "gallows humor" (p. 65) quality; that is to say they described grim or ironic situations that probably were not funny at the time but in retrospect were humorous. Gabriel, who had been a conscript in the Greek Navy, collected many stories from the Greek Navy—similar to "AB or Wanna Be"—that had a gallows humor quality. Gabriel explained that this type of story provides members of the organization with "protective armour" (p. 88) that helps them cope with the physical and emotional demands of the job. He said, "such stories often reveal a proud and defiant protagonist who rejects self pity, making light of the hardships, turning victimhood into survival

against the odds if not outright victory" (p. 65). "Dippy Sippy Donut Guy," "Page 10's," "Master Chief PT's," and "Big Papa in Waikiki" are other examples of humorous stories that were energizing, self-deprecating, or ironic (Gabriel, 2000).

Twenty-four of the stories collected in the course of this study had romantic qualities, but only two of the stories classified as romantic were about romantic love between two people, and those two stories involved sexual escapades that were strongly comedic. Most of the stories classified as romantic expressed deep admiration for others, such as mentors. Or they were stories that expressed a desire to take care of others such as subordinates, family members, or medical patients. This finding was to be expected. It was unlikely that participants would be inclined to share stories reflecting intimate personal emotions with an outsider in a professional setting. In the romantic-epic "Single Parent on Sea Duty," Master Chief Quin expressed a mother's love for a child and the angst she experienced when she needed to go to sea for a long period of time. In "New Chief Brings Hope," and "Page 10's," Senior Chief Dee and Master Chief Tom expressed deep admiration for their mentors.

Once the stories were classified by poetic modes it was easier to see how they helped the individuals who told them and heard them make sense, cope and navigate into the future. But, as was discussed in Chapter IV, it was impossible to use the first three research questions to discretely separate the stories by function. Once the poetic modes of the stories were identified, and once the participants were viewed as members of a storied space with dominant narratives, the first three research questions became more relevant to the data. That is to say, the ways that the participants used stories to make sense, give sense, cope and navigate into the future became evident and the stories could be discussed globally as contributors to those functions.

Stories and Sense Making

The Navy Chief Petty Officers who participated in this study used stories to make sense and give sense. This finding corroborated the findings of Weick (1993, 1995), Gabriel (2000), Czarniawska (1998), Boyce (1995) and Schein (1990). The participants in this study told stories to make sense and thereby resolve the dissonance inherent in their on-going interactions with their external environments. They made sense by creating—through story—a shared interpretation of reality that resulted in cultural maps that were called "dominant narratives" (Baskin, 2008, p. 1) in this study.

In "Master Chief Cal's story," Master Chief Cal made sense of how a young man who made many mistakes as a young sailor could succeed in the Navy. He used his personal story to give sense to others, communicating to them the dominant narrative "Growth through uncomfortability," implying that they could make mistakes and succeed if they learned from their mistakes. When he commented that he did not think he "would make it in the Navy today," he was attempting to make sense of the dissonance presented by an external environment that had changed since he was a young sailor. Through his antenarrative he was reshaping his view of reality, testing a dominant narrative and prescribing schemas for behavior in response to a new, emerging reality.

Weick (1995) explained that people use story to make sense of complex and sometimes confusing situations. In "Bow Planes Incident," Chief Jordan was making sense of how a person who was supposed to be a trusted and highly intelligent leader the Captain of the submarine—could make a grievous mistake. Chief Jordan was using the story to inform his behavior as a leader and communicate his view of effective leadership to his audience. In "Bow Planes Incident" Chief Jordan was testing the dominant narratives "Growth through uncomfortability," and "Trust."

In "Dude, What Happened," Master Chief Hassan was making sense of a confusing situation involving a perceived injustice to a sailor; he was using the story to communicate the importance of reciprocal trust and he was calling upon his fellow Chief Petty Officers to be courageous even when they are experiencing the dissonance that is inherent in going against the grain. In "What Happened Dude," Master Chief Hassan was testing the dominant narratives "Trust," "Suck it up," and "Take care of your people."

This study corroborated Boyce's (1995) findings that individuals create and sustain images of a wider reality in part to rationalize what they are doing. Boyce (1995) said that people tell touchstone stories (p. 18) that create a common view of reality and coalesce individuals around certain themes that reflect the essence of the organization. "9/11 on the Connie," was an example of a touchstone story that coalesced individuals around the theme that "you are part of something bigger than yourself." Master Chief Jeff used "9/11 on the Connie" to justify the need to return to sea without seeing loved ones after the terrorist attacks upon the United States in 2001. The "9/11" stories that followed in the group discussion affirmed his rationalization and confirmed the group's collective view of reality. These stories reflected a common desire to strike back after the nation was attacked (Boyce, 1995, 1996).

The participants in this study used story to organize and sequence their thoughts by compressing the timing of significant events, or stretching out the timing of events, to communicate understanding and create a desired effect. They used stories to create causal connections and sequences of action that did not exist when the events originally occurred, thereby retrospectively making sense and giving sense to their audiences. Senior Chief Sam used the story "AB or Wanna Be," to express his view of reality and to explain how he came to be a successful Aviation Boatswain Mate. Senior Chief Tim crafted a story with causal connections and an exciting plot in "Kitty Hawk Mishap," to make sense of a the confusing events that took place when a jet crashed on the flight deck of an aircraft carrier. In "New Chief Brings Hope," Senior Chief Dee compressed events that happened over an extended period into a short story that gave sense to others about how she succeeded and how to be a good leader. All of these stories contained a moral or a point that connected them to other stories being told, and thereby made sense in the context of a group discussion.

Using Stories to Cope in the Present

The participants in this study told stories that helped them cope in the present. They told stories that were cathartic and enjoyable such as "Dippy Sippy Donut Guy." They told stories to create bonds within the group, such as "9/11 on the Connie," and "Single Parent Deploys." They told stories that increased tension and decreased tension such as "Kitty Hawk Incident" and "We're Gonna Ace It." They told stories to get attention, bolster their egos and feel good, such as "Big Papa in Waikiki," and "Bow Planes Incident." They told stories to help others cope such as "Stroking on his Deathbed," and "AB or Wanna Be" They used stories and the discussion surrounding them to actively resolve dissonance in the present. And they used story to prescribe ways of behaving—called schemas in this study—such as "Suck it up," "Take care of your people," "Head on a swivel," and "Trust." In the present, the participants used story to give sense to those who were listening so that they could cope. For example, in "AB or Wanna Be" and "Stroking on his Deathbed," Senior Chief Sam and Senior Chief Tim were helping the young Aviation Boatswain Mates who worked for them feel good about their technical specialty even though the work was at times physically grueling and at other times tedious, boring or unglamorous. They were helping their subordinates feel proud of what they do and thus cope.

When events that happened in the past did not make sense, or when dominant narratives failed to enable sense making or sense giving, the participants engaged in antenarrative (Boje, 2001) in the present that questioned and tested dominant narratives. In this way the participants were constantly modifying their dominant narratives and schemas to respond to new information and cope in the present. Master Chief Cal engaged in real time antenarrative when he questioned if he "would make it" in the Navy today.

This study corroborated the findings of other studies that story is one way that organizational culture manifests itself, transmitting values and prescribing cultural maps for behavior (Boje, 1998; Boyce, 1995, 1996; Gabriel, 2000, 2004; Hansen & Kahnweiler, 1993; Mahler, 1988; Martin, et al., 1983; Martin & Powers, 1983; Peters & Waterman, 1982; Schein, 1983, 1985, 1990).

Hansen and Kahnweiler (1993) found cognitive frames embedded within stories that supported the internalization of corporate norms and provided a means through which organizational behaviors were managed. Likewise, dominant narratives, such as "Suck it up," "Head on a swivel," "Take care of your people," and "Trust," were embedded within stories collected for this study and provided a means through which organizational behaviors could be managed. Hansen and Kahnweiler (1993) found that being assertive, being a team player, taking risks and personal commitment to the organization were highly valued qualities and linked to effective leadership within the organizational stories they studied. The participants in this study told stories that reflected similar highly valued qualities. "Bow Planes Incident" and "What Happened Dude" reflected the value of assertiveness. "New Chief Brings Hope," "Remember the Stark, " and "We're Gonna Ace It" reflected the value of teamwork. "9/11 on the Connie" and "Kitty Hawk Incident" reflected the values of courage and commitment.

Hansen and Kahnweiler (1993) found that members of the same occupational culture tended to tell stories that were more alike than different. This study found that Navy Chief Petty Officers located in different locations at different times told stories that were more alike than different. The stories the Chief Petty Officers told reflected similar dominant narratives and prescribed similar schemas for how to behave, such as "Growth through uncomfortability," "Trust," "Take care of your people," and "Head on a swivel." This study also found through an analysis of narrative that the participants' connection to their occupational sub-culture of Navy Chief Petty Officers was stronger than their sub-culture connection to their ethnicity or gender.

Hansen and Kahnweiler (1993) found archetypal stories that reflected concerns with dualities such as equality vs. inequality, and control vs. lack of control. Dualities were also present in the interplay between the dominant narratives in this study that at times contradicted each other, such as "Suck it up" and "Take care of your people." Hansen and Kahnweiler (1993) concluded that stories act as cultural codes, and that they have implicit morals that reflect the shared values and belief systems of the organizational culture. This study also found implicit morals in the stories collected that reflected shared values such as take care of your shipmates, conform to the rules, trust the system, do not take yourself too seriously but take your work seriously, have a sense of humor, be assertive, admit mistakes and learn from mistakes.

This study found that sense making, sense giving, and coping, cannot be discretely relegated to past or present time frames within an organization. Many of the stories collected for this study, such as "Page 10's" and "AB or Wanna Be," were used to make sense of the past, cope in the present, and prescribe schemas for successful adaptation to the future. How the stories collected for this study were used to make sense of the past and cope with the present while also prescribing schemas to help people adapt to the future will be discussed in the next section.

Using Stories to Navigate Into the Future

The participants told stories that prescribed schemas for future behavior. Some stories, such as "Kitty Hawk Mishap" or "Remember the Stark," functioned like event simulators through which listeners could vicariously participate in the experiences of others from a safe distance. Dominant narratives prescribed schemas for how to respond to similar events in the future.

Most of the stories collected, such as "Raised by Wolves," "We're Gonna Ace It," and "Page 10's." performed multiple functions; they functioned to make sense of the past, thereby enabling the tellers and the listeners to cope with the present and proceed into the future. Some stories such as "What Happened Dude" served to inoculate against future misfortune by describing how to avoid situations that could be harmful to the individual, or the group.

Complexity Science Principles Applied to Story

Complexity science theory was used in this study to delve deeper into the how and why of story. No other theory seemed to capture the dynamic, almost living, quality of story as it moved through space and time. No other theory seemed able to explain storied interaction within and between complex entities and external environments.

The theories of Baskin (2008) and Boje (2001) incorporated aspects of both narrative theory and complexity theory that yielded the greatest insights into how and why story was working the way it was for the participants in this study. But once the theories of Baskin (2008) and Boje (2001) were applied to the data, complexity science principles distilled by others, such as Bloch, Henderson and Stackman (2006, 2007), Stacey (1996), Chia (1998) and Wheatley (2006) yielded further insights.

This study added to the research that supports the notion that complexity theory can inform how individuals and organizations interface with their environments. This study supported the contention that dissonance is a normal component of growth for complex adaptive systems. There is a tendency—perhaps especially in command and control type organizations—to want to try to exert control as organizations experience the imbalance and dissonance of phase transitions. But, as Master Chief Cal recognized, growth comes from "uncomfortability" and dissonance is a normal part of growth. The interplay of narrative and antenarrative as people and organizations attempt to cope with dissonance, and adapt to ever changing environments, can enhance creativity and uncover new and more effective paths to adaptability. Story and the discourse that accompanies it can result in double loop learning that enhances the creativity of an organization and therefore its adaptability. A heightened awareness of story can help individuals and organizations identify schemas that are maladaptive or in need of modification.

Implications

The findings of this study corroborated the findings of other studies that have found that narrative has implications for organizations as systems and the individuals who work in them as entities. While this study has particular relevance for people working within the storied spaces of the Navy—and those outside of the Navy who work with Navy members—it has broader implications well beyond the storied spaces of the Navy.

Increased Awareness and Interpretation of Reality

As was evidenced by this study, the primary benefit of studying narrative in organizations is increased awareness and insight that can inform behavior and thus enhance adaptability. Examining story can increase awareness of what an individual or group values as well as how they have interpreted reality, and how they continue to adapt their interpretation of reality to new information that is received. Interpretation of reality influences what the individual or the group sees as the truth.

Insights regarding the dynamic nature of story, informed by complexity theory, can help individuals and groups understand that perhaps their interpretation of reality is not the only, or the best, interpretation of reality. If members of a storied space are able to accept that their interpretation of reality is not the only interpretation of reality or perhaps not "the whole story" (Baskin, 2008, p. 2), they may be motivated to find common ground and negotiate modifications of dominant narratives and schemas to enhance adaptability and hence the survivability of their storied spaces and larger storied spaces.

But once a story is publically launched it becomes impossible to control the behavior that it may, or may not, influence, especially in a storied space that values free speech. As this paper was being written there was a national debate raging over whether to release the photos documenting the treatment of Prisoners of War in detention centers such as Abu Ghraib and Guantanamo Bay. It was argued that the photos, whether they paint an accurate picture or not, could be used to tell a story that would inflame terrorists and incite gruesome acts of violence against Americans around the world. Photos, or pictures of any kind, can be interpreted in a multitude of ways and used to support whatever story or dominant narrative an individual or group wants to tell. And once a story is told it will establish its own trajectory and inform schemas. This is an area with huge implications. What, if anything, can, or should, be done, as technology continues to connect people, at an ever-faster rate, around the globe, to filter or interpret information, that could result in destructive schemas?

Fortunately, if this study is any indication, there are just as many, or more, positive ways to interpret reality as negative ways. This study found numerous uplifting stories that reflected positive dominant narratives in the storied space of the Navy. The stories that were collected reflected values that the organization can be proud of, such as honor, courage, commitment, fairness, compassion, love, respect, honesty and integrity. There were inspirational stories that reflected altruism and the unity of "being part of something bigger than yourself." For centuries, select groups of people—those with the most power and influence—have decided how to interpret history. Often, in organizations, there have been a small number of people—those with the most power and influence—who determined the content of the "grande narratives" (Boje, 2001, p. 10); they have had "narrative hegemony" (Boje, 2001, p. 7) over the stories that would be accepted as truth. But other stories always existed. They were the stories told perhaps on the shop floor, or the mess decks in the Navy. In the post-modern world, there has been growing awareness of the other narratives within organizations, and an interest in reinterpreting history from different perspectives. Just as complexity science has uncovered the strength of diversity in complex adaptive entities, a complexity science perspective applied to organizational narrative could uncover alternative interpretations of reality that could lead to increased creativity and adaptability of organizations.

Bridging the Gap

Those seeking to guide organizations sometimes attempt to simplify information by reducing it to abstract words or phrases that fail to inform effective schemas. Organizational mission statements are an example of abstract phrases that often lack the rich complexity and plasticity required to function as effective schemas for behavior. This is not to say that organizational directives such as mission statements are ineffective; they probably mean a great deal to the people who developed them, but unfortunately they do not mean as much to those who were not involved in the narrative and antenarrative interplay that it took to create them. As a result, once they are promulgated, circulated, or posted, they become lifeless artifacts of the workshop that took place to produce them. Stories can contain rich complexity and prescribe diverse schemas suited to a wide variety of situations. Organizations can consciously work to identify stories that humanize abstract thoughts and bridge the gap between abstract thoughts and how to practically act upon those thoughts.

The words "honor, courage, commitment" in the Sailor's Creed are examples of abstract concepts—they are not concrete examples of behavior; therefore, by themselves they do not prescribe very practical schemas for behavior. Similarly, the labels the researcher has used for dominant narratives by themselves do not transmit meaning very well. The labels are a distillation of meaning derived from a collection of stories. The words "honor, courage, commitment" and the labels used to characterize dominant narratives in this paper are much richer when they are combined with an example—a story—that illustrates their meaning.

All of this is not to say that as a catalyst for adaptability and survivability, story can stand alone as a replacement for quantitative knowledge. What story can do is bridge the gap between quantitative knowledge and human experience, resulting in a more useful application of knowledge to real world challenges. Like the Challenger and Columbia space shuttle accidents discussed in the introduction to this paper, quantitative data requires holistic interpretation to be useful to humans. And human interpretation is based on individual and group interpretations of reality that have been formed over time through the interplay of quantitative data and narrative interpretation.

Leadership Training

The implications for those seeking to cultivate effective leaders is that classroom leadership training can be more effective if coupled with practical examples—that is to say, stories—derived from the students' own experiences or the experiences of others.

Cultivating students' ability to self-reflect as individuals and as groups upon examples from their own experiences of both effective and ineffective leadership can enhance double loop learning, and may be a better way to cultivate schemas of effective organizational leadership that will sustain the individual and the organization during times of dissonance and chaos.

Master Chief Quin commented that she "learned enough about leadership in six months of mess cranking in the Chiefs' Mess to sustain her entire career." Master Chief Tom commented, "To this day when I am faced with a problem, I often ask myself, 'What would Master Chief Bell do in this situation?'" Both of these highly successful Master Chief Petty Officers were drawing upon lessons they had internalized from people they admired, and worked with, over two decades previously. They had ready reference to a playbook of narratives and antenarratives, some conscious and probably some preconscious or unconscious, that continued to influence their schemas. They had the ability to tap into a part of their storied space that allowed for play, creativity and innovation, and to imagine a dialogue of sorts with someone they have not spoken with or seen in years. The capacity of humans to use their imaginations in this way is powerful. It has huge training implications, and the use of story to enhance creativity, innovation and novel solutions to problems should be studied more.

Stories as Simulators, Operationalizing Intuition

Beyond leadership training, stories have the capacity to function as simulators of sorts, allowing individuals to experience dangerous situations from a safe distance and practice schemas for how to effectively handle such situations when, and if, encountered. It was beyond the scope of this study to determine how stories such as "Kitty Hawk Incident," or "Remember the Stark" will effect the schemas of those who heard them, but other researchers have found evidence that such stories do affect behavior and can even serve to "operationalize" intuition (Chia, 1998). Confirming such findings could be a tremendous boon to the Navy and the military in general, as the military searches for safe and less costly ways to effectively train people for dangerous situations.

Weick (1993, 1995) analyzed, and wrote extensively about, the narratives of fire fighters and others who worked in high-risk occupations. The stories he analyzed were similar to "Kitty Hawk Mishap." Weick suggested that recollection of a story can slow down escalation in a frightening situation, thereby slowing the rate at which pressure builds. Weick suggested that a well-rehearsed story can help people simplify the task at hand and help them tolerate more pressure. Stories can reduce the element of surprise, and once the pressure is reduced and the pace is slowed people can be more attentive to both to the central and peripheral cues in the environment. Weick also suggested that while stories may help people manage pressure and improve sense making during emergencies they may be even more helpful in the prevention of emergencies, because dealing with imagined threats for obvious reasons is far less dangerous than dealing with actual threats. Weick said that stories can safely prepare people for crises by rehearsing both plausible and sometimes seemingly implausible circumstances (Weick, 1993, 1995).

Chia (1998) suggested that narrative plays a role in the development of "the Intuitive Method" (p. 358). Through communicating lived experiences story can maintain a necessary level of tension that can sustain complex adaptive systems operating at the edge of chaos, or what Lewin (2001) described as the "zone of creative adaptability" (p. 28). Accident stories may serve to sustain a complex adaptive system by operationalizing intuition (Chia, 1998). Gabriel (2000) said that stories about accidents could serve to increase tension and inoculate listeners against future misfortune.

Chia (1998) said that we naturally strive to "operationalize" knowledge. That is to say, we try "to translate concepts and ideas into measurable forms in order to render them more amenable to cognitive manipulation" (Chia, 1998, p. 345). He suggested that while story is difficult and perhaps impossible to operationalize in a meaningful way, it may be an effective way to communicate a deeper more complete meaning by allowing us to vicariously experience someone else's world. In this sense, using story may be one way, as Weick (1993, 1995) has also suggested, to enhance intuition, or, as Gabriel (2000) has suggested, inoculate against future misfortune. If story can serve to enhance intuition and in a sense inoculate against misfortune it could be of tremendous value in the Navy and to people working in other high-risk organizations.

Imagining a Positive Future

If humans can find guidance in imagined dialogues with former mentors, and rehearse for plausible and implausible scenarios through stories, it may be possible for them to imagine narratives about positive future outcomes that can inform schemas to achieve those outcomes.

As the researcher was writing this paper people around the world were facing job losses as a result of the most severe economic downturn since the Great Depression, and there were more United States soldiers, sailors, airmen and marines returning from war than at any time since the Vietnam War. People around the world were struggling to make sense, cope, and successfully navigate into the future. People who have lost their jobs—or their life savings—might benefit from an understanding of the dominant narratives that have served to guide their behavior and the behavior of the storied spaces they are a part of. For example a dominant narrative in the United States has been that everyone should own a home. That dominant narrative might not make sense for some people, especially people who are required to geographically relocate a great deal, or people who are required to live in high-cost areas because of their work. Stories that are functioning as limiting attractors—hindering adaptability—can be identified and changed, or modified, to enhance the adaptability of individuals and organizations. Self-reflection and self-awareness can help job seekers identify personal stories that illustrate the traits that make them excellent candidates for jobs, such as stories about how they have grappled with challenges and prevailed, or stories about mistakes they have made and what they learned from those mistakes, or stories about how they have successfully collaborated with others.

Similarly, self-awareness and reflection could help military people returning from war, or transitioning from the military into civilian careers, understand the personal and organizational narratives that have served to guide their actions. Understanding personal and organizational narratives could help transitioning military members identify traits they have honed in the military—such as self-sacrifice, teamwork, diligence and stamina—that make them appealing candidates for jobs outside of the military. Those seeking to assist military members in transition could benefit from understanding the narratives that have informed the behavior of military members and the organization as they guide them through transitions. This study corroborated the findings of other organizational narrative studies that organizational stories are rarely morally negative. This study, like others, found that while participants are willing to engage in stories about organizational tragedies or failures, they almost always cast the storyteller in a positive light. Even the stories about blunders or mistakes collected for this study cast the storyteller in a morally positive light by illustrating that the storyteller learned a valuable lesson from the mistake. Such stories usually identify a scapegoat or describe some other reason, outside of the storyteller's control, for the tragedy. This finding was to be expected. If individuals, and groups, are viewed as complex adaptive entities it follows that they are using stories to enhance their adaptability to their environment—moral negativity might be interpreted as a sign of maladaptability. Even morally negative stories told by individuals to analysts, counselors, confessors or intimates are voiced in the hope that through dialogue a positive outcome can be achieved.

Schein (2006), after years of working with organizations as a process consultant, drew a parallel between organizational consulting and therapy for individuals, suggesting that drawing out the strengths of an organization through eliciting its stories is not unlike drawing out the strengths of individuals through eliciting their personal stories. He suggested that eliciting organizational narrative was an effective way for consultants to help organizations apply their strengths to their problems and successfully grapple with future challenges. He said,

The more I examined process consultation and observed my own behavior as a consultant, the more I realized that what consultants do is very akin to therapy, but this formulation is not acceptable to most managerial clients. Organizational pathologies of all sorts are evident whenever one gets into client situations but in working with organizational cultures one must learn to use the metaphors and linguistic categories that make sense to them and enable them to save face and avoid defensiveness. I realized that the best kind of therapy draws on personal and culture strengths even though the process is triggered by pathology, weakness or problems. The consultant/therapist must learn to draw out the strengths in the culture and show how they can be used to solve the problems facing the organization. (p. 297)

It has been said repeatedly in this paper that humans use story to make sense of the past, cope with the present, and navigate into the future. Yet the stories collected for this study did not fall discretely into those categories or temporal frames. Einstein's theory of relativity illustrated that temporal constructs are the product of a conscious human mind. Jung (1964) in his work with dreams found that temporal constructs do not exist in the subconscious realm of dreams. In the dreams symbols are mixed up—there are rarely plots, tropes or poetic modes. Dreams are not proper stories, but like stories they help people cope with dissonance, and, when interpreted, help people make sense.

Boje (2001) and Baskin (2008) implied that antenarrative—"an improper storytelling, a wager that a proper narrative can be constituted" (Boje, 2001, p. 1)—is like a dream. It is the preconscious attempt to resolve dissonance, and once given voice it is an attempt to interpret and make sense. Baskin (2008) suggested that through story humans can "imagine new futures, act on those stories and change the world so that they can realize such futures" (p. 2). The implication is that through narrative and antenarrative humans can unleash the creativity of their imaginations by turning dreams into proper stories and developing schemas for how to achieve them.

Finally, the storied space needs to "Trust," that the values it has espoused through its dominant narratives are conducive to positive future outcomes. As Baskin (2008) said, "the critical difference is the ability of human beings to tell stories, and change the world so that they can realize such futures" (p. 2).

Recommendations

The study of narrative in organizations is relatively new compared to many other areas of social science research. The studies that have been done seem to have scratched the surface, some probing more deeply than others, but there are numerous questions to explore, such as: Why and how stories continue to inspire and influence behavior years after they were told? Can stories inspire altruism, if so, how? Can stories truly serve to operationalize intuition, if so, how so, and to what end? How can stories be more effectively studied? How can stories be studied to more effectively assess the impact upon listeners? Can, and should, stories be controlled in a society that values free speech? What is the correlation between storytelling skill and leadership ability? How can the impact of storytelling be more effectively measured? How can organizations use storytelling to greater effect to problem solve and plan? How can technology be used to support and enhance storytelling? Why are some people more effective storytellers than others, and can people learn to be better storytellers?

Researchers have only begun to scratch the surface regarding how complexity science thinking can inform how story works for the people who tell and listen to stories within organizations. Technological innovations may help to make qualitative and quantitative exploration of text more meaningful or perhaps easier to interpret, thereby enabling researchers to explore how complexity thinking informs the functions and meanings of narrative and story.

Following up on Schein's (1983, 1985, 1990) work with culture and narrative, once stories are part of a deeply ingrained dominant narrative can they be changed, and if so how? How do people decide which stories to tell and when to tell them? What part do luck and serendipity play in determining which stories are told, or are accepted as truth? How can people become more aware of the dominant narratives that are influencing their behavior? How can people identify, and craft, stories to better communicate meaning? How can attending to story enhance double loop learning? How can complexity science principles application to narrative be explored further to uncover how and why stories function the way they do?

If, as Jung (1964) has suggested, interpretation of dreams can result in enhanced sense-making and coping, how might narrative and antenarrative work with dreams to enhance human understanding and adaptability? How could narrative and antenarrative be used to help those who live and work in chaotic environments—such as war zones—to cope and successfully navigate into the future?

Finally, it would be interesting to explore further how Navy Chief Petty Officers have used, and continue to use, story—this study just scratched the surface. Finally, how might Navy Chief Petty Officers, as well as others in similar positions, use their experiences, communicated through story, to enhance the adaptability and understanding of the individuals they are charged with guiding and training? How might Navy Chief Petty Officers, as well as others, use story to bridge the gap between technical knowledge or abstract concepts and real world applications to enhance the adaptability and survivability of their storied spaces? How could Navy Chief Petty Officers use story to facilitate organizational change?

Conclusions

In Chapter III, I began to tell the story of this project. I described grappling with how to collect and analyze stories. When I embarked upon this journey I knew stories were powerful, but I wondered why and if they somehow could be put to greater use in organizations. I was drawn to a study of story but perplexed by how to go about analyzing stories without reducing them to isolated fragments of little value. I thought insights could be gained from identifying the poetic modes, plots and tropes of stories, but traditional narrative analysis built upon literary and linguistic analysis failed to explain the dynamic nature of story. Observing that stories helped people make sense, cope and navigate into the future seemed to be stating the obvious; and the stories collected did not fall discretely into the functional or temporal categories of past, present or future. So I found myself returning repeatedly to the questions of how and why stories work the way they do, and kept coming back to complexity science theory as a way to answer those questions.

It could be argued that applying principles of complexity science to a study of story was not substantially different than applying systems of analysis pioneered by the ancient Greeks who identified themes, messages and morals in their deconstruction and analysis of stories and myths over two millennia ago. But I would argue that the difference is more than one of semantics. Complexity science theory seems to inform the dynamic—almost living—quality of story that other forms of interpretation fail to capture. Stories, such as "Smith's Cranial" in the introduction to this paper, illustrate the fluid and plastic nature of story. Similarly the dominant narratives identified in the stories collected for this study and the storied spaces of the storytellers and story audiences demonstrated the adaptive quality of story, that cannot be adequately described by terms that seem to cage attributes—such as plots, themes, cultural maps and tropes.

The discovery of truth is often cited as the goal of research. If truth exists at all it could be argued that it was the goal of this study to uncover it by allowing the stories and the participants to speak for themselves. Therefore, the following traditional Jewish folk tale (author unknown) is offered as a concluding comment.

The Story of Truth

Truth walked into a village. The local inhabitants started cursing at him. Spewing epithets, they chased him out of the village. Truth walked along the road to the next town. They too spit at him and cursed and spewed epithets driving him out of town. He walked, lonely and sad, down the empty road, until he reached the next town, still hoping to find someone who was happy to see him who would embrace Truth with open arms. So he walked into the third town, this time in the middle of the night, hoping that dawn would find the townsfolk happy to see Truth with dawn's light. But as soon as the townsfolks' eyes lit upon him they ran to their homes and then came back throwing garbage at him. Truth ran off, out of town, into the woods, and after crying and cleaning off the garbage returned to the edge of the woods when he heard laughter and gaiety, singing and applause. He saw the townsfolk applauding as Story entered the town. They brought out fresh meats and soups and pies and pastries and offered them all to Story who smiled and lavished in their love and appreciation. Come twilight, Truth was sulking and sobbing at the edge of the woods. The townsfolk disdainfully ignored him, but Story came out to see what the story was. Truth told Story how all the townsfolk mistreated him, how sad and lonely he was and how much he wanted to be accepted and appreciated. Story replied, "Of course they all rejected you," Story looked at Truth, eyes a bit lowered to the side, and said, "No one wants to look at the naked Truth." So Story gave Truth brilliant, beautiful clothing to wear, and they walked into the town together, Truth with Story, and the townsfolk greeted them with warmth and love and appreciation, for Truth wrapped in Story's clothing is a beautiful thing and easy to behold. And ever since then Truth travels with Story and they are always accepted and loved. And that is the way it was, and the way it is, and that is the way it always will be. (Henshall, 2005)

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Appendix A: Glossary of Navy Terms

Active duty: Working full time in the military, in contrast to being in reserve status on *in-active duty*—not currently working full time in the military.

Aircraft Carrier: A large Navy warship that serves as a platform for launching and landing planes; sometimes referred to simply as a "carrier."

Aviation Boatswain mate (AB): See "Boatswain mate" below. An aviation Boatswain mate that is especially trained to perform flight deck work on an aircraft carrier.

Boatswain mate: A Navy technical rating used to describe the Navy people who perform the work on the deck of a ship, including all mechanical equipment on deck, such as lines, winches, tractors, fire fighting equipment, life boats, fueling and mooring to a pier. Sometimes called a "Bosun." The Boatswain mates are also in charge of ceremonial duties on deck that include rendering honors to dignitaries. Rendering honors would include blowing on a whistle, called a "Bosun's pipe," to announce the arrival of distinguished visitors.

Brow: The movable part of a ship that connects it to the pier like a bridge.

Chief Petty Officer: A non-commissioned officer with a technical specialty who usually serves in a middle management position, especially with respect to training and leading lower ranking petty officers and non rated sailors; sometimes referred to simply as a Chief or CPO.

Chiefs' Mess: Traditionally the compartment (room) onboard a ship where the Chief Petty Officers congregate for meals, meetings and socializing. Or the term used to refer to the fraternity of chief petty officers in general.

Command: a discreet organization, or unit, within a branch of the armed services. To be "in command" is to be in charge of an organization.

Commander: a senior commissioned officer (pay grade O-5), or an officer who is in charge of an organization, or unit, within the armed services.

Commanding Officer (CO): The officer in charge of a military organization. Sometimes referred to as the Captain or the skipper.

Commissioned Officer: An officer, who is appointed by the president to serve in a leadership capacity in the armed forces.

Compartment: A room on a ship designed for a specific function. For example, people on a ship sleep in the berthing compartments. Rooms are also referred to as "spaces."

Enlisted Person: Active duty military person in pay grades E-1 to E-9, serving for a set period of years under an enlistment contract, in contrast to a commissioned officer who serves "at the pleasure of the president" for an unspecified period of time.

Executive Officer: Second in command of a Navy ship, squadron or other Navy organization. Usually referred to simply as the "XO."

Flag Officer: A senior commissioned officer (pay grade O-7 or above); the most senior level of commissioned officer; an admiral in the Navy.

Hangar Bay: The large enclosed area below the flight deck on an aircraft carrier where planes are parked when not in use. Planes are moved from the flight deck to the hangar bay by elevator.

Master Chief: The highest enlisted rank possible, pay grade E-9.

Mess cranking duty: The work of assisting the cooks on the ship with food preparation, serving and cleaning up after meals. Every sailor is usually assigned to a period of mess duty. It is usually viewed as difficult, tedious and unpleasant.

Mess decks: The spaces on the ship where the crew eats meals.

Midshipman: A student in college training to become a commissioned officer in the Navy.

Non-Commissioned Officer: A senior enlisted person who serves under an enlistment contract rather than by presidential appointment, usually functioning in a middle management position (pay grades E-4 through E-9).

Non-rated personnel: A soldier, sailor, or marine in a non-management position (pay grades E-1 through E-3).

Old salt: A seasoned sailor. A sailor respected for their vast experience at sea and resulting wisdom.

Operational command: An organization functioning in a front-line capacity to accomplish the overall mission of the parent organization; for example, an aircraft carrier is an operational command with a war-fighting mission of launching and recovering aircraft at sea.

Pay Grade: The level of salary that accompanies rate. Enlisted pay grades from lowest to highest are E-1 to E-9. Officer pay grades from lowest to highest are O-1 to 0-9.

Petty Officer: A rated, non-commissioned officer (pay grades E-4 through E-6) with a technical specialty who may be serving in a first line supervisory position.

Plan of the Day (POD): The official daily announcements of a command distributed by the commanding officer. In the modern Navy the Plan of the Day is usually promulgated in paper format, or online in an electronic format. In the old Navy the Plan of the Day was read each morning to the entire crew at the same time.

Public Affairs Officer: A person in the Navy whose duties are public relations, such as arranging for ship tours and dealing with the media.

Quarterdeck: The area on the ship that all people cross when going onboard the ship or leaving the ship. The area where visitors are signed in and greeted. All people coming on board or leaving a Navy ship must get approval to do so at the quarterdeck.

Sailor: A general term for Navy members below the rank of Chief (E-1 through E-6).

Sea services: For the purposes of this paper, Sea Services will be used to refer to the United States Navy and United States Coast Guard.

Sea story: A term used by sailors to describe a story with a beginning, middle and an end, usually illustrating some point. A Sea Story is usually meant to be instructive or entertaining and while plausible is not intended to be strictly factual.

Skipper: The commanding officer, person in charge, of a ship.

Training command: An organization that functions to train service members for operational duty.

Wardroom: The space on the ship where the officers eat meals and hold meetings. Also refers to the officers as a group

Appendix B: Letter to the Academy

March 12, 2007 Master Chief XXXX Address

Dear Master Chief XXXX:

As discussed in our phone meeting, I am a retired Navy commander working on a doctoral dissertation in Organization and Leadership at the University of San Francisco. I am writing to ask your command to participate in the field research that I am conducting for my dissertation. In my study I am exploring the role sea stories play in the sea Navy, including how sea stories help Navy members comprehend the past, cope with the present, and navigate into the future.

I am requesting your help in three ways. (1) Permission to observe a day of activities at your command, that is to say, I would like to sit in on a day of classes and other activities observing and interacting with students and instructors throughout the day. (2) Permission to conduct one group interview at your command. The group interviews, composed of two to five volunteers, will last one to two hours each. (3) Permission to conduct individual follow-up interviews with the volunteers from the group interviews to discuss the stories told in the group interview process. The observations and interviews will occur at a convenient time and place for the instructors and students. I would like to audio-tape the interviews. I would not need to tape classroom observations, but I would like to take notes of my observations to record stories and narratives as they arise in the course of the day. The participation of your command, your instructors and students would be voluntary, and your command or any participants may withdraw from the study at any time. In any discussions or written documents, I will protect students' and instructors' identities and that of your organization by using pseudonyms rather than real names. While I will quote directly from interviews and observations, I will be attentive to protecting confidentiality.

I appreciate very much your assistance and generosity in facilitating my learning process. Additionally, I am willing to share a summary of my findings with you which might lead to some insights regarding the function of sea stories that could possibly benefit your command. If you have questions about the project, please call me at (619) 501-8859. You may also contact my doctoral advisor, Dr. Debby Bloch, at (415) 422-2533.

Sincerely,

Patricia Reily, Commander USN (retired), Doctoral Student, University of University of San Francisco

Appendix C: Introduction to Observation Sites

Memo to Chief Petty Officers

Researcher Seeking CPO Volunteers for Study.

Patricia Reily, a retired Navy commander working on a doctoral dissertation in Organization and Leadership at the University of San Francisco, will be onboard with us from (dates). Commander Reily is doing research on the role that sea stories, and other narratives, play in the day-to-day operations of the Navy. As part of her field research she would like to sit in on classes to observe how narratives and sea stories are used in the classroom and during other typical daily activities. Commander Reily is also seeking volunteers to participate in a group and individual interview discussions about sea stories. The group interviews will take place at (location) and will last approximately 90 minutes. The individual interviews at a convenient time and location for the interviewee, and will last approximately one hour.

The benefits to you. The only anticipated benefit of the study for volunteers will perhaps be a better understanding of the role that stories play in their interactions with others and in the Navy. Another benefit might be that with a better understanding of the role sea stories play it might be possible for volunteers to use them even more effectively in the future.

The costs. There will be no financial costs, or benefits, to the volunteers who take part in this study.

Confidentiality. Commander Reily will be taking notes of her observations, to document the emergence of stories in the course of a day at this command. She will be

audio-taping the group interview. In her writing Commander Reily will use pseudonyms in lieu of real names if she quotes or refers to anyone by name.

How to volunteer. Please let Master Chief (name) know by (date) if you would like to participate in the group interview discussion. It is important for you to remember that your participation in Commander Reily's research is strictly voluntary. Please direct any questions to Master Chief (name).

Appendix D: Observation Participant Informed Consent

Date

Dear Participant:

I am giving you this letter and Participant's Bill of Rights in advance of my observations in your classroom at XXXX command. As we discussed earlier, I am conducting a study of the role of sea stories in the United States Navy. In my study I am exploring the role that sea stories play in the Navy, including how members of the Navy use sea stories to comprehend the past, cope with the present, and navigate into the future.

Purpose and background

I understand that Commander Patricia Reily (USN retired), a graduate student in Organization and Leadership at the University of San Francisco, is doing a study on the role of sea stories in the United States Navy. I am being asked to participate because I am a member of the United States Navy.

Procedures

If I sign this letter I am acknowledging that I understand what Commander Reily is doing and that I agree to allow her to sit in as a participant observer in my class. *Risks and/or discomforts*

It is possible that being observed as part of a research study may make me feel uncomfortable but I am free to stop my participation at any time. Participation in research may mean a loss of confidentiality, but study records will be kept as confidential as possible. No individual identities will be used in any reports or publications resulting from the study. Study information will be kept in a secure filing cabinet.

Benefits

There will be no direct benefit to me from participating in this study. However, it is possible that I may benefit from a better understanding of the role that stories play in the Navy. A possible benefit could be that with better a better understanding of the role of stories it might be possible to consciously employ them more effectively.

Financial considerations

There will be no financial costs to me as a result of taking part in this study.

Payment/reimbursement

There will be no financial payments or reimbursements to me as a result of taking part in this study.

Commander Reily has answered any questions I have about this study. If I have further questions about the study, I may contact Commander Reily at (619) 501-8859 or (408) 656-8458. If I have any questions or comments about participation in this study, I should first talk with Commander Reily. If for some reason I do not want to talk with Commander Reily, I may contact the IRBPHS office at the University of San Francisco by phone (415) 422-6091, and leave a voice mail message, or I may email IRBPHS@usfca.edu, or I may write to the IRBPHS, Department of Psychology, University of San Francisco, 2130 Fulton Street, San Francisco, CA 94117-1080. *Consent*

I have been given a copy of this letter including the "Research Participant's Bill of Rights." PARTICIPATION IN RESEARCH IS VOLUNTARY. I am free to decline to be in this study or to withdraw from it at any time. My decision as to whether or not to participate in this study will have no influence on my present or future status as a student or employee at the University of San Francisco.

My signature below indicates that I agree to participate in this study. I have read and received the Research Participant's Bill of Rights and consent to participating in a research study conducted by Patricia Reily, a student of the University of San Francisco.

RESEARCH PARTICIPANT'S BILL OF RIGHTS

As a research participant, you have the following rights when you become involved as a participant in a research project conducted by a student from the University of San Francisco:

- To be treated with respect and dignity in every phase of the research
- To be fully and clearly informed of all aspects of the research prior to becoming involved in it.
- To be given the explicit choice of whether or not you will become involved in the research under the clearly stated provision that refusal to participate or the choice to withdraw during the activity can be made at any time without penalty to you.
- To be treated with honesty, integrity, openness and straightforwardness in all phases of the research.
- To be shown proof that an independent and competent ethical review of the human rights and protections associated with the research has been successfully completed.

- To demand complete personal confidentiality and privacy in any reports of the research.
- To expect that your personal welfare is protected and promoted in all phases of the research.
- To be informed of the results of the research study.

Appendix E: Interview Participant Informed Consent

Date

Name

Command

Address

Dear Participant:

I am giving you this letter in advance of our group interview on (date, time, place). As we discussed earlier, I am conducting a study of the role of sea stories in the United States Navy. In my study I am exploring the role sea stories play in the Navy. *Purpose and background*

Patricia Reily (commander, USN, retired), a graduate student in the School of Education at the University of San Francisco, is doing a study on the role of sea stories in the United States Navy. I am being asked to participate because I am a member of the United States Navy and part of my job is supervising and training other people in my branch of service.

Procedures

If I agree to be a participant in this study I will take part in a one to two hour group interview on the subject of sea stories.

Risks and/or discomforts

It is possible that discussing sea stories may make me feel uncomfortable, but I am free to stop my participation at any time. Participation in research may mean a loss of confidentiality. Study records will be kept as confidential as possible. No individual identities will be used in any reports or publications resulting from the study. Study information will be coded and kept in a secure filing cabinet. Because the time required for my participation may be up to two hours I may become tired or bored. *Benefits*

There are no promised direct benefits to me from participating in this study. But, the anticipated benefits of participating in this study might be a heightened awareness regarding the role story plays in my life and work. As a result of my heightened awareness it might be possible for me to consciously employ stories even more effectively to communicate complex ideas, share knowledge or motivate people. *Financial considerations*

There will be no financial costs to me as a result of taking part in this study. Payment/reimbursement

There will be no financial payments or reimbursements to me as a result of taking part in this study.

Questions

I have talked to Ms. Reily about this study and have had my questions answered. If I have further questions about the study, I may call her at (619) 501-8859 or (408) 656-8458. If I have any questions or comments about participation in this study, I should first talk with Ms. Reily. If for some reason I don not want to do talk with Ms. Reily, I may contact the IRBPHS office by phone (415) 422-6091, and leave a voice mail message, or I may email IRBPHS@usfca.edu, or I may write to the IRBPHS, Department of Psychology, University of San Francisco, 2130 Fulton Street, San Francisco, CA 94117-1080.

Consent

I have been given a copy of the "Research Subject's Bill of Rights" and I have been given a copy of this consent form to keep. PARTICIPATION IN RESEARCH IS VOLUNTARY. I am free to decline to be in this study or to withdraw from it at any time. My decision as to whether or not to participate in this study will have no influence on my present or future status as a student or employee at USF.

My signature below indicates that I agree to participate in this study.

Subject's Signature

Date

Signature of Person Obtaining Consent

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Date

Appendix F: Letter to Ship

Name Ship Address 1

Dear XXXX:

As discussed in our phone meeting, I am a retired Navy commander working on a doctoral dissertation in organization and leadership at the University of San Francisco. I am writing to ask your command to participate in the field research I am conducting for my dissertation. In my study I am exploring the role sea stories play in the sea services, including how sea stories help people in the sea services comprehend the past, cope with the present, and navigate into the future.

I am requesting that you allow me to go to sea with you for a period of five days to observe the emergence of stories in an operational environment. I would like to shadow one or two volunteer Chief Petty Officers for several hours each day to observe how they use stories to transmit knowledge, communicate complex ideas, and motivate people (to name just a few roles of story). As a participant observer I will attempt to be as unobtrusive as possible.

The observations will occur at a convenient time and place for the volunteers. I would like to take notes of my observations to record stories and narratives as they arise in the course of the day. The participation of your command and the chiefs who participate in this study would be strictly voluntary, and your command or any participants may withdraw from the study at any time. In any discussions or written documents, I will protect the identities of participants and that of your organization by using pseudonyms rather than real names. While I may quote directly from interviews and observations, I will be attentive to protecting confidentiality.

I appreciate very much your assistance and generosity in facilitating my learning process. Additionally, I am willing to share a summary of my findings with you which might lead to some insights regarding the role of sea stories that could possibly benefit your command. If you have questions about the project, please call me at (619) 501-8859. You may also contact my doctoral advisor, Dr. Debby Bloch, at (415) 422-2533.

Sincerely,

Patricia Reily, Commander USN (retired), Doctoral Student, University of San Francisco

Appendix G: Introduction to Potential Volunteer CPO's on the Ship for Observations and Interviews

Memo to Chief Petty Officers' Mess on board USS (ship name).

Researcher Embarked (dates) Seeking CPO Volunteers for Study.

Patricia Reily, a retired Navy commander working on a doctoral dissertation in Organization and Leadership at the University of San Francisco, will be embarked with us from (dates). Commander Reily is doing research on the role that sea stories, and other narratives, play in the day-to-day operations of the U.S. Navy and Coast Guard. As part of her field research she would like to shadow several CPOs for several hours each day to observe how narratives and sea stories are used in their daily interactions with others. She would also like to interview each volunteer for approximately one hour at a time and place convenient for them about their use of sea stories.

The benefits to you. The only anticipated benefit of the study for volunteers would perhaps be a better understanding of the role that stories might play in their interactions with others and in the Navy. Another benefit might be that with a better understanding of the role sea stories play it might be possible for volunteers to use them even more effectively in the future.

The costs. There will be no financial costs, or benefits, to the volunteers who take part in this study.

Confidentiality. Commander Reily will be taking notes of her observations, to document the emergence of stories in the course of interactions. She will be audio-taping

the individual interviews. In her writing Commander Reily will use pseudonyms in lieu of real names if she quotes or refers to anyone by name.

How to volunteer. Please let Master Chief (name) know by (date) if you would be willing to allow Commander Reily to shadow you for several hours to observe your interactions with others and conduct an individual interview follow the shadowing period. It is important for you to remember that your participation in Commander Reily's research is strictly voluntary. Please direct any questions to Master Chief (name).

Appendix H: IRBPHS Approval

September 4, 2007

Dear Ms. Reily:

The Institutional Review Board for the Protection of Human Subjects (IRBPHS) at the University of San Francisco (USF) has reviewed your request for human subjects approval regarding your study.

Your application has been approved by the committee (IRBPHS #07-068). Please note the following:

Approval expires twelve (12) months from the date noted above. At that time, if you are still collecting data from human subjects you must file a renewal application.
 Any modifications to the research protocol or changes in instrumentation (including wording of items) must be communicated to the IRBPHS. Re-submission of

an application may be required at that time.

3. Any adverse reactions or complication of the part of participants must be reported (in writing) to the IRBPHS within ten (10) working days.

If you have any questions please contact the IRBPHS at (415) 422-6091.

On behalf of the IRBPHS committee, I wish you much success in your research.

Sincerely,

Terence Patterson, Ed.D, ABPP Chair, Institutional Review Board for the Protection of Human Subjects

Appendix I: Interview Introduction Script

Proposed Script: The purpose of this group/individual interview is to discuss stories and other narratives. Those of us who have been in the sea services for more than a few months know what a "sea story" is. Most organizations have a similar genre of stories that are told and retold in the organization. In the army and law enforcement such stories are often called "war stories." Fire fighters call them "fire stories." In the Coast Guard and the Navy we call them "sea stories," and they have probably been told since sailors took to the seas. As you well know most sea stories are introduced with the phrase "And there we were..." or (pardon the expression) "And this is no shit..." Those phrases are the attention getting signal to your audience to listen up because you are about to tell an entertaining, interesting or instructive story. Sea stories are not necessarily factual reports although they are usually based in reality and may contain facts. The facts are not as important as the underlying message in sea stories. Sea stories are not case studies. They are not necessarily meant to lead to a predetermined conclusion; that is to say, the interpretation of a sea story is usually left to the audience. Sea stories are not legends, myths, fables or fairy tales, because they are grounded in reality and they are believable, although they may evolve into legends or myths.

At this point you may be struggling to recall a single sea story. I spent 20 years in the Navy listening to sea stories every day and when someone first asked me to tell them a sea story I drew a complete blank. That is one of the factors that makes stories so interesting. We don't have them filed in our brain under the heading "stories." They are such a ubiquitous part of our daily interactions and thought processes that we don't consciously think about the role they play in our lives or how we use them. You may have already thought of a story that fits the criteria I have described. If you have a story and you feel comfortable sharing it please do. If not, I have a couple of open ended questions that may get the ball rolling. And I have one or two of my own sea stories since I have had plenty of time to think about this topic—that I can share to prime the pump, so to speak.

I need to address one more point before we start having some fun—the possible benefits to you for participating in this discussion. I hope that you leave our meeting today thinking it was time well spent. I have only just started to study this topic, but I can honestly say that a heightened awareness of stories has given me tremendous insight into my life, and my interactions with other people and my world. I now consciously think about how I might use a story to communicate more effectively with my kids, my husband, my colleagues and my friends. I now see stories everywhere and my eyes have been opened to their power and potential. I can't guarantee that you will have a similar experience but I believe it's possible. So, let's get started.

Introduction to classrooms

- Introduction: Hello, my name is Patricia Reily. I am a retired Navy commander working on a doctoral dissertation in Organization and Leadership at the University of San Francisco.
- As you may already know, XXXX has graciously agreed to allow this command to participate in the field research I am conducting for my doctoral dissertation.

- 3. As part of my field research I will be sitting in on your classes to observe how narratives and stories are used in your daily activities and interactions with each other.
- I hope that my presence will not significantly alter the normal conduct of operations, activities and discussions. I will not participate except by my presence.
- 5. I have a letter of consent that I will pass around for you to sign. The letter acknowledges that you have been told what I doing. Please sign the back page acknowledging your understanding. Copies of the letter and a Research Participant's Bill of Rights are available on the desk by the door for you to take with you.
- 6. While XXXX has agreed to allow me to conduct my field research at this command it is important for you to know that your participation is voluntary. If any of you are uncomfortable with my presence, or if you do not want to participate in this research, please let me know. I will leave copies of my card on the table with the letters. I am staying at (location). Please contact me if you have any concerns.
- 7. I am also looking for volunteers to participate in group interviews. The group interviews will take place at (location). They will last approximately 90 minutes. Some of you have already agreed to participate in this study. Please let me know sometime today if you want to participate in the interviews and have not already told Master Chief (name).

- I will take notes of my observations but my study records will be kept in a secure filing cabinet.
- No individual identities will be used in any publications resulting from the study. I may quote from classroom discussions but if I do I will use pseudonyms to protect confidentiality.
- 10. The only anticipated benefit of the study for you is a better understanding of the role that stories might play in your life and in the Navy. Another benefit could be that with a better understanding of the role of stories it might be possible to consciously employ them more effectively.
- 11. There will be no financial costs to you as a result of taking part in this study.
- 12. Unfortunately, there will be no financial payments or reimbursements to you as a result of taking part in this study. Sorry, I am just a retired naval officer so you know how much I make!
- 13. Do you have any questions?

Appendix J: Shadowing, Observation, Interview, Protocol

Date:	Time:
Location:	
Name:	
Job title and c	lescription:
Others presen	t:
1.	Please tell me your story. How did you get where you are today?
2.	What challenges do you face in the course of your work?
3.	What do you think makes this organization tick?
4.	How do you use story in the course of your day, if at all?
5.	Do you have any questions, or is there anything else you would like to talk
	about or add?

Notes and Observations:

	a	a :	NT ' /'	
Research Questions	Sense-	Coping	Navigating	Complexity
	making			
Story List				
Story title:				
5				
Mode:				
widde.				
Other characteristics				
(characters, plot, tropes,				
emotions):				
Teller:				
Locator:				
Story title:				
5				
Mode:				
Other characteristics				
(characters, plot, tropes,				
emotions):				
Teller:				
Locator:				

Appendix K: Story Analysis Protocol and Working Table

Appendix L: Story Analysis Protocol, Research Questions

- MAKING SENSE of the past (Baskin, 2008; Boje, 2001; Gabriel, 2000; Weick, 1995):
- a. How does this story explain something that has happened and perhaps continues to happen?
- b. How is this story being used to construct reality for this person or a shared view of reality for this group?
- c. What elements of dominant narrative, grand narrative or micro-storia are present in this story?
- d. What elements of antenarrative are present in this story, or interplay between narrative and antenarrative?
- 2. COPING with the present (Baskin, 2008; Boje, 2001; Chia, 1998; Gabriel, 2000):
- a. How is this story being used to help people cope and hence survive?
- b. How is this story being used to resolve dissonance?
- c. Is this story cathartic, if so how?
- d. Is this story being used as a cultural map, if so how?
- e. What elements of antenarrative are present in this story, or interplay between narrative and antenarrative?
- NAVIGATING into the future (Baskin, 2008; Boje, 2001; Chia, 1998; Gabriel, 2000; Weick, 1995):
- a. How is this story functioning to help people describe the past and therefore cope with the present and proceed into the future?

- b. How is this story being used to imagine the future and thus navigate into the future?
- c. How is this story turning possibility into activity?
- d. How could this story be used as an inoculation against misfortune?
- 4. COMPLEXITY theory:

How can principles of complexity theory explain how stories are functioning for these people in this organization? What evidence of the following complexity principles can be found in this story?(Baskin, 2008; Bloch, et al., 2007; Boje, 2001; Chia, 1998) (Note: The following list is adapted from Bloch, Henderson and Stackman (2007, p. 200-201):

- Autopoesis: self organizing, adapting internally to a changing external environment (Maturana & Varela, 1987).
- b. Complex Adaptive Systems (CASs) or Complex Adaptive Entities (CAEs) (Bloch, et al., 2007): open exchange, ongoing flow and interchange of energy (Bloch, et al., 2007; Gell-Mann, 1994; Kauffman, 1995; Stacey, 1996; Waldrop, 1992).
- c. Networks: closely knit and ever widening (Barabasi, 2002).
- d. Fractals: CAEs exhibit fractality. They can be seen in the structures within them and they themselves echo larger structures (Mandlebrot, 1982).
- Phase transitions: the dynamic processes between order and chaos that provide the opportunity for organizational creativity and emergence (Barabasi, 2002; Baskin, 2008; Kauffman, 1995; Stacey, 1996).
- Fitness Peaks: During phase transitions CAEs seek adaptations to their new environments. Match analogy (Kauffman, 1995)

- g. Non-linear Dynamics: A linear dynamic is one in which every cause has its equal effect. The movements in phase transitions are best explained by non linear dynamics. The transitions between order and chaos are drawing on multiple causes from multiple network relationships, from a continuing interplay of the internal and external—no simple linear regression (Bloch, et al., 2007).
- h. Sensitive dependence: Small changes may bring about large effects (Bloch, et al., 2007).
- i. Limiting attractors: several types of attractors may be seen to be operating as entities move through transitions. Some appear to limit change and growth. Others "strange attractors" enhance growth.(Bloch, et al., 2007; Kauffman, 1995)
- j. Strange attractors: lead to emergence .
- k. Spirituality: interconnectedness, unity (Bloch, et al., 2007, p. 200)
- 1. Dissipative structures (Bloch, et al., 2007; Kauffman, 1995)

Appendix M: Master Narrative List

(Stories cited in the paper are highlighted in bold)

<u>Sto</u>	ory Title	<u>Storyteller</u>
1.	In Daddy's footsteps	Senior Chief Dee
2.	From construction to the Navy	Master Chief Mike
3.	Second class followership	Master Chief Mike
4.	Klaus and his little sisters	Senior Chief Dee
5.	Klaus makes MC	Senior Chief Dee
6.	MC PTs in khakis	Senior Chief Dee
7.	New Chief Brings Hope	Senior Chief Dee
8.	The recruit from Lowe's	Master Chief Mike
9.	Command SAVIC faces ethical dilemma	Senior Chief Dee
10	. Straight skinny from the Chiefs' Meeting	Senior Chief Dee
11	. Stuck in Stuttgart	Master Chief Mike
12	. Softball team returns like VIPs	Senior Chief Dee
13	. Band of sisters	Senior Chief Dee
14	. Oprah at sea	Senior Chief Dee
15	. Commander Asshole	Senior Chief Brian
16	. XO's spouse wears the stripes	Master Chief Brian
17	. The cheng erups	Master Chief Jeff
18	. Sometimes you need to scream	Master Chief Jeff
19	. Operation Pacific	Senior Chief Brian

20. French fries	Master Chief Hassan
21. The first 72 hours	Master Chief Hassan
22. Under Pop's wing	Master Chief Hassan
23. They can't ride their bikes today	Senior Chief Carl
24. Seaman "I could give a crap" gets his due	Master Chief Hassan
25. Down to the Paint Locker	Master Chief Bob
26. My ex took it all	Master Chief Brian
27. Solving the parking problem in Norfolk	Senior Chief Carl
28. Dude What Happened?	Master Chief Hassan
29. Shave and a haircut more than two bits	Senior Chief Brian
30. On liberty in Peru	Senior Chief Carl
31. Sorry Chief you're stayin put	Master Chief Hassan
32. Who's gonna be the "MoFo"?	Master Chief Hassan
33. All of a sudden you know something	Master Chief Hassan
34. All of a sudden they're listening	Senior Chief Carl
35. Good morning master chiefs	Master Chief Carl
36. Don't be the guy	Master Chief Eric
37. Mids at the chiefs' club	Senior Chief Shane
38. Bow Planes Incident	Chief Jordan
39. Skipper that was stupid	Senior Chief Eric
40. The Dirty Dozen Shop	Senior Chief Jeff
41. Daddy salutes	Senior Chief Jordan
42. All this fun and a paycheck too	Senior Chief Jeff

43. I need a big machete	Senior Chief Jordan
44. Submarine sailor goes berserk	Senior Chief Shane
45. 3 class A mishaps in 3 months	Senior Chief Jeff
46. Lovesick sailor jumps ship	Senior Chief Eric
47. You don't need to like me to do your job	Senior Chief Shane
48. Attempted suicide in stripper's car	Senior Chief Jeff
49. MCPON answers: what is a chief?	Senior Chief Eric
50. No collar devices	Senior Chief John
51. Wrong coveralls	Senior Chief Dave
52. 9/11 on the Connie	Senior Chief Tracy
53. Subs and 9/11	Senior Chief John
54. There's a body in the freezer	Senior Chief Tracy
55. 9/11 in Johnstown with the marines	Senior Chief Dave
56. Boomer in Dry Dock gets underway	Senior Chief John
57. Smitty sits on the chocks	Senior Chief Dave
58. Smack yourself on the hand	Senior Chief John
59. CMS inventory	Senior Chief John
60. Squadron mishandles destructs	Senior Chief Dave
61. Chief chews ass, XO takes a lesson	Senior Chief John
62. Page 10's	Master Chief Tom
63. Up to the flight deck	Master Chief Tom
64. Dippy Sippy Donut Guy	Master Chief Tom
65. Boy Wonder	Master Chief Tom

66. Three faces of Eve in the Navy	Master Chief Tom
67. MJ in the Salsa	Master Chief Cal
68. Living the American Dream	Chief Saul
69. Baby born at sea	Chief Sara
70. Johnny Weismuller in Subic Bay"	Senior Chief Tim
71. Bat Man of Perth	Senior Chief Tim
72. Riding the canopy	Senior Chief Tim
73. Master Chief Cal's story	Master Chief Cal
74. I am going to call your parents	Master Chief Cal
75. Lorelei goes home	Chief Sara
76. Cabbage Patch Doll and the amputee	Chief Sara
77. No place for divas	Senior Chief Tim
78. Chipping paint in the ship yard	Senior Chief Evers
79. Then be the boss	Senior Chief Evers
80. Petty officers stay to do the job right	Senior Chief Evers
81. Pilots eject into the water	Senior Chief Evers
82. SOPs are written in Blood	Senior Chief Evers
83. Jet blasters malfunction	Senior Chief Evers
84. Pimpin' or Limpin'	Senior Chief Evers
85. AB or Wanna Be?	Senior Chief Sam
86. Strike, Strike, Strike	Senior Chief Jerry
87. Chief killed observing on deck	Chief Tray
88. Seaman reporting as ordered	Chief Vela

89. Y	es, I beat him up	Chief Vela
90. K	itty Hawk Mishap	Senior Chief Tim
91. R	emember the Stark	Senior Chief Jerry
92. Pi	lot ejects, plane still going	Chief Cord
	e's a piece of crap and pretty soon ou're going to smell like him	Senior Chief Jerry
94. Fo	orklift slides off the deck in the snow	Senior Chief Tully
95. R	ewriting the A School curriculum	Senior Chief Tully
96. T	he stories of the coins	Senior Chief Tully
97. St	troking on his death bed	Senior Chief Tim
98. B	ig Papa in Waikiki	Chief Brent
99. B	ig Papa in the bushes	Chief Brent
100.	Big Papa in Vlad	Chief Brent
101.	Ladder well competitions	Chief Brent
102.	Wife gets into pay pal account	Chief Bryant
103.	Enterprise on the sand bar	Chief Bryant
104.	AIMD paperwork dilemma	Senior Chief Jeffers
105.	AIMD passes inspection	Master Chief Arcelo
106.	New pair of sneakers	Senior Chief Jeffers
107.	Coffee Mess gets happy	Senior Chief Jeffers
108.	We're Gonna Ace It	Master Chief Arcelo
109.	Failed AMI	Master Chief Arcelo
110.	Recruiter takes his own advice	Chief Rolf

111.	Chief Rolf's Story	Chief Rolf
112.	Needed to get out of East LA	Senior Chief Pay
113.	Coin on the Missouri	Senior Chief Pay
114.	Women in the Deck Department	Senior Chief Pay
115.	Young Joe the sleeper	Master Chief Joe
116.	If the Navy offers you a school take it	Master Chief Joe
117.	Brother duty in the PI	Master Chief Joe
118.	Heart attack rehab in singapore	Master Chief Joe
119.	Division did skip a beat	Master Chief Joe
120.	First trip on an airplane	Master Chief Ray
121.	Morals and Ethics in A School	Master Chief Ray
122.	Write your own obit	Master Chief Ray
123.	Hand in a bucket of water	Master Chief Ray
124.	Santa Barbara port visit	Master Chief Ray
125.	Raised by Wolves	Master Chief Quin
126.	What do you do with a retired CMC	Master Chief Quin
127.	Single Parent Deploys	Master Chief Quin
128.	Life is not fair—so get used to it	Master Chief Quin
129.	Dolphins and recreational sex	Senior Chief Tim

Antenarratives and Observations used:

Handler and the Hornet (Video & discussion)	Senior Chief Tim
Do your job and we will take care of the rest	Master Chief Cal
This is the only world they will know	Master Chief Quin
You can grow out of being a screw up	Master Chief Joe
He hasn't done a thing (observation & discussion)	Master Chief Quin
Hot meal for the duty crew	Senior Chief Sam
Need to pick up the standard	Master Chief Ray

Appendix N: Stories and Antenarratives Grouped by Dominant Narratives

Dominant Narratives or Schemas		Stories and Storytellers
1. "Growth Through	1.	Handler and the Hornet (Tim)
Uncomfortability"	2.	Cal's story (Cal)
Learn from mistakes	3.	AB or Wanna Be? (Sam)
Admit mistakes	4.	Young Joe the sleeper (Joe)
Forgive mistakes	5.	2 nd Class Spokesman (Mike)
5	6.	Commander Asshole (Brian)
	7.	The Cheng erupts (Jeff)
	8.	Under Pop's Wing (Hassan)
	9.	Can't ride bikes today (Carl)
	10.	Seaman could give a crap gets due (Hassan)
	11.	Down to the paint locker (Bob)
	12.	My "ex" took it all (Brian)
	13.	Shave and a haircut (Brian)
	14.	On liberty in Peru (Carl)
	15.	Good Morning Master Chiefs (Carl)
	16.	Don't be the guy (Eric)
	17.	Bow Planes Incident (Jordan)
	18.	Skipper that was stupid (Eric)
	19.	The dirty dozen shop (Jeff)
	20.	I need a big machete (Jordan)
	21.	Sub sailor goes berserk (Shane)
	22.	3 Class A mishaps (Jeff)
	23.	Chipping paint (Evers)
	24.	Petty Officers stay to do the job right (Evers)
	25.	SOPs are written in Blood (Evers)
	26.	Chief killed observing on deck (Tray)
	27.	Yes, I beat him up (Vela)
	28.	Kitty Hawk Mishap (Tim)
	29.	He's a piece of crap (Jerry)
	30.	Big Papa in Waikiki (Brent)
	31.	Big Papa in Vlad (Brent)
	32.	Big Papa in the bushes (Brent)
	33.	Smitty sits on the chocks (Dave)
	34.	Smack yourself on the hand (John)
	35.	Chief chews ass, XO takes a lesson

(Stories cited in the paper are highlighted in bold)

		(John)
	36.	Page 10's (Tom)
	37.	0
		Boy Wonder (Tom)
	38.	MJ in the Salsa (Cal)
	39.	Handler and the Hornet (Tim)
	40.	Riding the Canopy and duct divers
		(Tim)
	41.	I'm gonna call your parents (Cal)
	42.	Wife gets into pay pal account
		(Bryant)
	43.	Failed AMI (Arcelo)
	44.	AIMD passes inspection (Arcelo)
	45.	New pair of sneakers (Jeffers)
	46.	Needed to get out of East LA (Pay)
	47.	Young Joe the sleeper (Joe)
	48.	Heart Attack Rehab in Singapore (Joe)
	49.	That's young Joe (Joe)
	49. 50.	Write your own obit (Ray)
	51.	Raised by Wolves (Quin)
	52.	What to do with a retired CMC (Quin)
	53.	I can tell by looking at him (Quin)
2 "Take some of your people"	1.	New Chief Drings Hone (Dee)
2. "Take care of your people"		New Chief Brings Hope (Dee)
But don't "cuddle them too much"	2.	Under Pop's Wing (Hassan)
Build a team	3.	That's young Joe (Joe)
Be a coach	4.	Cabbage patch doll and the amputee
Take care of your brothers		(Sara)
Take care of your sisters	5.	Band of sisters (Dee)
Take care of your shipmates	6.	Hot meal for the flight line (Sam)
	7.	Get to work on time and we take
		care of the rest (Cal)
	8.	Softball VIPs (Dee)
	9.	Klaus and his little sisters (Dee)
	10.	Klaus makes MC (Dee)
	11.	In Daddy's footsteps (Dee)
	12.	Command Savic faces Dilemma (Dee)
	13.	Here's the straight skinny from the
	15.	Chiefs (Dee)
	14.	XO's spouse wears the stripes (Brian)
	15.	The first 72 hours (Hassan)
	16.	On liberty in Peru (Carl)
	17.	Mids at the Chiefs' Club (Shane)
	18.	This is a warship not a friendship
	10.	
	10.	(Jerry)

	 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 	Attempted suicide in stripper's car (Jeff) Master Chief Cal's Story (Cal) SOP's are written in blood (Evers) Jet blasters malfunction (Evers) Stroking on death bed (Tim) Charge Book (Tully) Page 10's (Tom) Boy Wonder (Tom) Baby born at sea (Sara) I'm gonna call your parents (Cal) Lorelei goes home (Sara) Cabbage Patch Doll and the amputee (Sara) Women out number men in deck (Pay) Write your own obit (Ray) Raised by Wolves (Quin)
	35. 36.	What Happened Dude (Hassan) The Dirty Dozen Shop (Jeff)
 3. "Suck it up" Follow the rules Conform Don't expect special treatment Don't be a diva Accept responsibility Accept consequences Do what you are told 4. "Trust"	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 1.	Commander Asshole (Brian) Chipping Paint (Evers) AB or Wanna Be? (Sam) The Cheng erupts (Jeff) Sometimes you need to scream (Jeff) Mids at the Chiefs Club (Shane) Daddy salutes (Jordan) No place for divas (Tim) CMS Inventory (John) Enterprise on the sandbar (Bryant) New pair of sneakers (Jeffers) Santa Barbara Port visit (Ray) Life is not fair so get used to it (Quin) I can tell by looking at him (Quin) Single Parent Deploys (Quin) Sorry Chief you're staying put (Hassan) From construction to the Navy (Mike) This is a warship not a friendship (Jerry) You don't need to like me to do your job (Vela) Brother duty in the PI (Joe)
4. 1 fust	1.	Drouler duty in the P1 (Joe)

Trust your shipmates	2.	Bow Planes Incident (Jordan)
Trust your gut	3.	All of a sudden they're listening (Carl)
Trust the system	4.	SOPs are written in Blood (Evers)
Trust your superiors	5.	Remember the Stark (Jerry)
Trust your brothers	6.	Second class followership (Mike)
Trust in God	7.	Band of sisters (Dee)
Trust in Ood	8.	Mids at the Chiefs club (Shane)
	o. 9.	Get to work we'll take care of the rest
		(Cal)
	10.	We're Gonna Ace It (Arcelo)
	11.	Handler and the Hornet (Tim)
	12.	Three Class A mishaps
	13.	Living the American Dream (Saul)
5. "Don't take yourself too seriously,	1.	Dippy Sippy Donut Guy (Tom)
but take your work seriously"	2.	Page 10's (Tom)
"Work hard, play hard"	3.	9/11 in Johnstown with the marines
Know your craft and hone it		(Dave)
Be able to laugh at yourself	4.	French Fries (Hassan)
Do what is right, not what is easy	5.	All this fun and a paycheck too (Jeff)
Accept responsibility	6.	Pimpin' or Limpin' (Evers)
Have fun	7.	Big Papa in Vlad (Brent)
	8.	Big Papa in Waikiki (Brent)
	9.	Big Papa in the bushes (Brent)
	10.	Handler and the Hornet (Tim)
	11.	MC PT's in Khakis (Dee)
	12.	Stuck in Stuttgard (Mike)
	13.	Oprah at sea (Dee)
	14.	You put on khakis and you know
	-	something (Hassan)
	15.	All of a sudden they're listening (Carl)
	16.	I need a big machete (Jordan)
	17.	No collar devices (John)
	18.	Wrong coveralls (Dave)
	19.	Chipping paint (Evers)
	20.	AB or Wanna Be? (Sam)
	21.	Three faces of Eve (Tom)
	22.	Batman of Perth (Tim)
	23.	Dolphins and recreational sex (Tim)
	24.	Show up for work and we'll take
		care of the rest (Cal)
	25.	Stroking on his Deathbed (Tim)
	26.	Recruiter takes his own advice (Rolf)
	27.	CMS Inventory (John)
	28.	Never turn down training (Joe)

	29.	What Happened Dude (Hassan)
	30.	Morals and ethics in A School (Ray)
	31.	Determined to report as ordered (Vela)
	32.	Mishandling destructs (Dave)
6. "head on a swivel"	1.	Bow Planes Incident (Jordan)
Stay Alert	2.	Sub sailor goes Berserk (Shane)
Stay flexible—"Nothing ever goes down	3.	Sorry chief you're stayin' put (Hassan)
exactly as planned"	4.	Stuck in Stuttgard (Mike)
5 1	5.	Chief killed observing (Tray)
	6.	Baby born on board (Sara)
	7.	Kitty Hawk Mishap (Tim)
	8.	Heart attack and rehab in Singapore
		(Joe)
	9.	Women in the Deck Department
		(Pay)
	10.	This is the only world they will
		know (Quin)
	11.	Skipper that was stupid (Eric)
	12.	I need a big machete (Jordan)
	13.	Three Class A mishaps (Jeff)
	14.	Lovesick sailor jumps ship (Eric)
	15.	Attempted suicide in stripper's car (Jeff)
	16.	Pilots eject into the water (Evers)
	17.	Pilots eject plane still going (Cord)
	18.	Forklift slides off deck (Tully)
	19.	Rewriting the A school curriculum
		(Tully)
	20.	9/11 on the Connie (Tracy)
	21.	Subs and 9/11 (John)
	22.	9/11 in Johnstown (Dave)
	23.	Boomer gets underway (John)
	24.	Dippy Sippy Donut Guy (Tom)
	25.	Three faces of Eve (Tom)
	26.	Johnny Weismuller in Subic (Tim)
	27.	Batman of Perth (Tim)
7. Some stories should not be told	28. 1.	Enterprise on the sandbar (Bryant)
7. Some stories should not be told	1.	I don't have any stories (female chief at the academy)
	2.	Some stories should not be told (chief
		at lunch on ship)
	3.	Ship PAO
	•••	Smp 1710