2003

The Infusion of Higher Education in the U.S. Army: A Sociolinguistic Study of an Organizational Information Dissemination Process

Gerald Allen Kehr

THE INFUSION OF HIGHER EDUCATION IN THE U.S. ARMY: A SOCIOLINGUISTIC STUDY OF AN ORGANIZATIONAL INFORMATION DISSEMINATION PROCESS
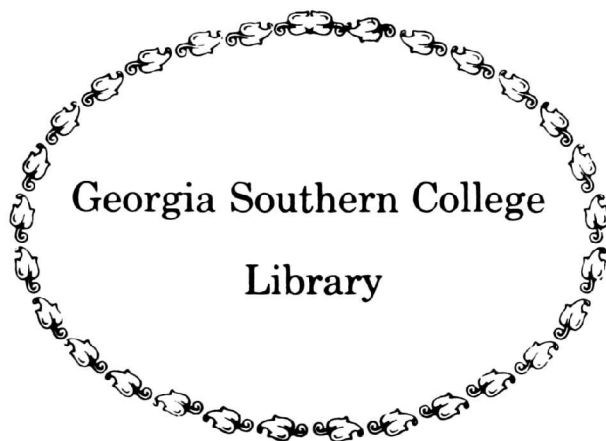
Gerald Allen Kehr

THE INFUSION OF HIGHER EDUCATION IN THE U.S. ARMY

A SOCIOLINGUISTIC STUDY OF AN ORGANIZATIONAL

INFORMATION DISSEMINATION PROCESS

A Dissertation

Presented to

the College of Graduate Studies of

Georgia Southern University

———————————

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

in

Educational Administration

———————————

by

Gerald Allen Kehr

December 2003
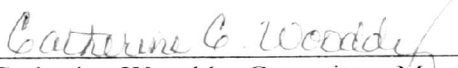
August 15, 2003

To the Graduate School:
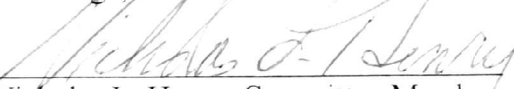
This dissertation entitled "The Infusion of Higher Education in the U.S. Army:
A Sociolingustic Study of an Organizational Information Dissemination Process" and
written by Gerald Allen Kehr is presented to the College of Graduate Studies of
Georgia Southern University. I recommend that it be accepted in partial fulfillment
of the requirements for the degree of Doctor of Education with a major in
Educational Administration.

_____
Michael D. Richardson, Supervising Committee Chair

We have reviewed this dissertation
and recommend its acceptance:

_____
Catherine Wooddy, Committee Member

_____
Fred Page, Committee Member

_____
Nicholas L. Henry, Committee Member

_____
Randal D. Carlson
Acting Departmental Chair

Accepted for the Averitt College of Graduate Studies:

_____
Charles J. Hardy
Acting Dean, College of Graduate Studies

DEDICATION

To my sweet Heather darl'n, ind wishkobad manito ikkwe, ind sâagiiwewin.
We started with nothing much but our mutual trust and a longing for a love we both were
convinced we would never find in this life. My love, we have come a long way these
many years. From the first you brought me joy, gave me hope, and rekindled in me the
magic of life I nearly lost had you not found me; you give honor and purpose to my life—
for that and much more, I am eternally grateful.

Coco…we did it, girl! In the dim light flickering in the damp and cold that closed
in on us, we huddled together for warmth and companionship, waiting for the end of
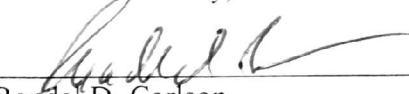winter to be free again to roam the deep forest alone for weeks and months at a time,
gliding across the clear blue lakes, running through the fields where the Spirit of Life fills
the heart. Throughout my childhood my puppy you taught me by example to push my
fears aside, stand against the odds, and that love was not for the taking, but for the giving.

To the warriors of the 173rd Airborne Infantry, always out numbered, and often
down to knives and bare fists, yet the line was held. From the first, we knew that even if
we survived every fight, we would never truly come home. In your name I challenged my
mind, cultivated my creative spirit, mustered my courage, and "stepped forward."

To the Anishinaabe , I "dreamed the impossible dream, fought the unbeatable
foe…" Bimossewin ininajawăgan nind anishinăbewiidis—another journey begins.

iv

VITA

Gerald Kehr is presently Assistant Professor of Political Science at East Georgia College, Swainsboro, Georgia teaching American Government and Speech Communication.

Academic credentials:

Associate of Arts, De Anza College, Cupertino, CA.

Bachelor of Arts, Social Psychology, San Jose State College, San Jose, CA.

Master of Arts, Speech-Communication, San Jose State University, San Jose, CA.

Master of Arts, Political Science, Western Washington University, Bellingham, WA.

Gerald Kehr has the good fortune to share his life in marriage with the brilliant and charming Heather Forsyth Kehr who is presently a Presidential Management Fellow at the Office of Personnel Management, Washington, DC.

Gerald and Heather have a son, Jeremy Kehr, who is keeping America free and safe serving in the United States Air Force.

The extended Kehr family circles the globe, representing an array of nationalities and ethic backgrounds befitting a U.N. meeting.

ABSTRACT

THE INFUSION OF HIGHER EDUCATION IN THE U.S. ARMY:

A SOCIOLINGUISTIC STUDY OF AN ORGANIZATIONAL

INFORMATION DISSEMINATION PROCESS

DECEMBER 2003

GERALD ALLEN KEHR

A.A., Liberal Arts, DE ANZA COLLEGE

B.A., Social Psychology, SAN JOSE STATE COLLEGE

M.A., Speech-Communication, SAN JOSE STATE UNIVERSITY

M.A., Political Science, WESTERN WASHINGTON UNIVERSITY

Directed by: Professor Michael D. Richardson

The present research was dedicated to uncovering sociolinguistic coupling mechanisms, specifically the metaphor, and their role in the infusion of higher education in the U.S. Army. It was argued that levels of ambiguity connected to inter-sociolect lexicons embedded within sociolect-specific metaphors may impede effective communication between officers and senior enlisted personnel regarding the role of higher education in the overall U. S. Army mission. Information gained from this research is dedicated to the development of how the U.S. military can better infuse higher education into its ongoing professional development programs. A qualitative interview method was used to conduct the research. Eleven Respondents, six enlisted, five officers, were asked to speak freely about how they would describe the Army Continuing

Education Systems (ACES) and other continuing educational programs in general.
Respondents were also asked to speak freely about how they perceived how a higher
education may (or may not) impact lower ranking enlisted personnel. These questions
were posed to the respondents from the perspective that they were communicating their
point of view to either superior or subordinate ranking personnel.

The proposed study was designed to answer the following overarching question:
Within a U. S. Army installation, what are the possible semantic misinterpretations that
may surround various metaphors used between officer and senior enlisted cadre during
the infusion process associated with encouraging lower-enlisted personnel to engage in
the Army's ACES professional development program? The proposed study addressed
the following sub-questions:

1. What metaphors do military officers use to describe the ACES program when they
   communicate with the senior enlisted cadre?

2. What metaphors do military officer cadre use when communicating with senior
   enlisted cadre to describe how higher education serves lower ranking enlisted
   personnel in their role in the overall Army mission relative to developing critical
   thinking skills within the increasingly technologically sophisticated combat
   environment?

3. What metaphors do military officers use to describe the ACES program when they
   communicate with senior enlisted cadre?

4. What metaphors do senior enlisted military cadre use when communicating with
   officers to describe how higher education serves lower ranking enlisted personnel in

their role in the overall Army mission relative to developing critical thinking skills within increasingly technologically sophisticated combat environment?

5. What, if any, lexical argots exist within officer and senior enlisted sociolects that may create semantic misinterpretation of metaphors applied to the ACES program and its role within the U.S. Army? That is, how do officers and senior enlisted personnel interpret their respective metaphors?

The present study was predicated on research indicating that socio-economic differences tend to undermine communication within social subcultures; the results obtained in the present study did not support this assertion. Unexpectedly, however, both officer and enlisted samples either alluded to, or stated forthrightly, that level of formal education has in their view an intrinsic status component that often paralleled (if not superseded) the traditional military ranking system. Most respondents supported the idea that present rank-attainment protocols are linked to level of formal education. Further, it was noted that formal education was connected to a greater ability to engage in critical thinking under stress, and thus was seen as an important leadership component.

None of the interviewees reported having difficulty understanding the metaphors and/or lexical sets used by either officer or enlisted personnel. The proposition that some level of ambiguity between officer and enlisted sociolects exists in the U.S. Army was not supported in the present research. The present research did not indicate that enlisted personnel were in any way more negative toward higher education than officers. Of note, however, was that both officer and enlisted interviewees provided metaphors supportive of the notion that higher education is superseding high school as America's

educational standard. It also noted that the present informal organizational status structur

within the military might be transitioning, privileging level education over military rank.

TABLE OF CONTENTS

Table of Contents (continued)

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

General Introduction

In 1957 a generation of American school children watched the night skies for the passing of Sputnik, and in the light of day for the next thirty years lived through the end of one educational era and the beginning of another (Cremin, 1993; Goodchild & Wechsler, 1997; Lucas, 1994). The launching of Sputnik marked not only the entry of America into an age of space exploration (Laurillard, 1997), but prompted what many consider the beginning of America's national effort to dominate what has come to be known as the Information Age. Until 1957, the three disparate sectors of government, academia and private business were somewhat at odds with each other in terms of their worldviews of the respective roles of theory and practice in the advancement of education and national interests (Beck, 1986; Breneman, Leslie & Anderson, 1993; Etzioni, 1995; Reed & Johnson, 2000; Kellner, 2000). With Sputnik and the ensuing thrust toward global technological advancement, these three sectors drew closer together ideologically as they formed the military-industrial complex that has shaped America's involvement in the information age (Kerr, 1995; Stever, 1999; Stoessinger, 2001).

Higher Education: Seeking Foundations of Judgmental Heuristics

Underlying its many and varied forms, higher education has had a long-standing agenda founded on the belief in the inherent value of knowledge, and the development of critical thinking skills upon which to reflect and expand the boundaries of human

knowledge (Goodchild & Wechsler, 1997; Lucas, 1994). For over twelve hundred years most institutions of higher education have held as thematic to their purpose, inquiry into the premises upon which society draws its judgmental heuristics (Popkin, 1999). Within this framework, the academic community often challenges both the theories and practices that are fundamental to human society (Kuhn, 1970; Kuran, 1995). Although representing a wide spectrum of worldviews, the scholar's mindset is steeped in contemplative reflection of what is known and what is yet to be explored and discovered. This speculative, questioning approach to the world centers on the possibility of alternative explanations in what some contend is only a seemingly chaotic universe (Marion, 1999; Rutgers, 2001). It is this one theme around which the Information Age was born, and continues to expand (Boorstin, 1986).

Over the centuries the proactive pragmatic demands of the forward-thinking private, commercial sector of human society (Curtin, 1984) has found kinship with the reflective and analytical skills imbued in those who have successfully endured the rigors of higher education (Kerr, 1995; Randolph, 1960; Stoessinger, 2001; Tishman, Perkins, & Jay, 1995). Over the last forty years the once predominantly reactive and highly bureaucratized American government has evolved into a more proactive, increasingly privatized, operational environment (Dye, 1998). In recent years the focus on functional flexibility within both private and government organizations, an increase in individuated decision-making, and the relationship they have to skills attained from a higher education, has enveloped one of America's traditionally most static institutions: the U.S. military. With the recognition that education and individual performance extends to the out-most periphery of the command structure, the U.S. military has recently created

programs to encourage participation in higher education within all rank levels, with emphasis on the lower ranking personnel (Sheldon, 2000).

Education in the U.S. Army: "Front and Center"

There are few arenas in the panorama of human experience that are more information-dependent, or more impacted in such a fundamental survival-oriented manner by information, than is warfare. It is speculated that this circumstance will only grow in magnitude throughout the 21st century and beyond (Chen, & Gooch, 1990; Sheldon, 2000). Among the U.S. military service branches the U.S. Army is the largest, and as such has the greatest number of lower ranking enlisted personnel under its command. For centuries the frontline solider was considered the last link in a long, unidirectional chain of command structure. In recent years this circumstance has changed dramatically (Coppa, & Gericke, 2000; Kegley & Raymond, 2002). The application of compact, mobile interactive communication systems alone, for example, gives lower ranking, frontline combatants more direct discretionary responsibility for battlefield outcomes. This requires a level of education that has never before in the history of warfare been demanded of frontline soldiers (Coppa & Gericke, 2000; Harrington, 2000).

The capability of near-instantaneous interactive feedback to and from command and the frontline, has created a communication web that, in the practical environment of the battlefield, works to all but dissolve prior conceptions of leadership and followership and creates instead a situation-specific fellowship environment (Driscoll, 2000). One of many poignant examples that support the educational mandate of the U.S Army is the integration of frontline soldiers into the development of accurate on-site battlefield Human Intelligence (HUMINT) with Signal Intelligence (SIGNINT) and Imagery

Intelligence (IMINT). In recent years these once separate information-centered activities have become incorporated into the Intelligence Battlefield Operating System (BOS), which is ultimately integrated into the computerized All-Source Analysis System (DoD FM 34-3 Intelligence Analysis and Synthesis, 2002). By the end of the Gulf War the U.S. Army found that the base of its information-gathering pyramid was the frontline enlisted soldier. A future analysis of the 2003 Iraq war will likely underscore the valuable role of the lower ranking frontline combatant given officer-level decision-making responsibilities in the gathering and assessment of direct in-field intelligence.

Privates Thinking Like Officers: The Democratization of Higher Education

Among experienced combatants one of the many clichés that seems to ring true is the adage, "The best generals were privates." This viewpoint accentuates the transformational leadership model which asks leaders to visualize problems from the perspective of the peripheral-most participant; a point of view that advocates the development of leadership empathy by approximating or having the direct shared experience of the follower (Hawthorne & Henderson, 2000; Elshtain, 1995; Eisnor, 1995). Advocates of instilling critical thinking skills into the life-long learning experience (Rudinow & Berry, 1999; Tishman, Perkins, & Jay, 1995) would likely support recent efforts to infuse this ability into the military community. The merits of critical thinking are being actively infused into the lowest ranking personnel in response to the realization that the further-most participant in the traditional, top-down, decision-making model must be allowed (or required) to have a better understanding of, and therefore, more empathy for, the broader scope confronting the battlefield commanders (DoD ACES, 2002;Volker, 1999).

Thomas Jefferson's ideas regarding the value of democratizing higher education underscore the premise that followers and leaders are interactive, each centered on what he saw as contributors within an informed polis. A true representative republic, according to Jefferson, is based on active citizen participation by all segments of society (Ball & Dagger, 1991; Edwards, Wattenberg, & Lineberry, 2002; Kimmerl, & Stephen, 1998). Key to this thesis is the notion that human communication is highlighted by a continual need for both intra-personal reflection and context-bound interpretation within the meaning-attribution process (Edwards, 1985; Gibson, 2000; Lee, 2000; Wittgenstein, 1969). Some observers see this refractive aspect of human communication as extending into interpersonal one-on-one, one-to-few, and few-to-many communication settings, and in each case multiplying the communicative web geometrically relative to the additive number of participants. This perspective emphasizes multi-dimensional, interactive decision-making as foundational to what has been traditionally cast as unidirectional leadership (Barkow, Cosmides, & Tooby, 1992; Bryman, 1999; Henderson & Hawthorne, 2000; Fox, 1998; Lee, 2000; Luhmann, 1995; Rutgers, 2001). This insight underscores Bourdieu's (1994) assertion that society is communication. Students of organizational decision-making that stress Chaos and Complexity theories (Marion, 1999) extend Bourdieu's thesis with the recognition that communication has an inherent ephemeral quality. This viewpoint works to support points of leadership that recognize that information exchange is fundamentally transitory and that decision-making is an interactive, intensely social, undertaking (Goodwin,1981; Goffman, 1974;1981;1994; Sacks, Schegloff, & Jefferson, 1974).

In recognition of the connection between more multidirectional information exchanges within a military force based on the critical thinking skills provided by higher education, the U.S. Army initiated its Army Continuing Education System (ACES) in July 2000 (Dana, 1999). The infusion of this program into the military has met with much success, but observers contend that the process of coupling higher education into the lower ranks of the military has not yet been fully incorporated into the traditional military mindset (Sheldon, 1999).

Tradition Meets Transition: Seeds of Bias

Although the military establishment has historically demonstrated a negative tendency toward innovation, some observers note that this long-standing trend, particularly regarding educational standards, has been dramatically reversed in recent years (Coppa & Gericke, 2000; DoD, 2002; Driscoll, 2000). This circumstance was followed by a concerted effort on behalf of the military command in the past ten years to provide more higher educational opportunities as both recruitment and retention inducements, and to offer lateral post-military-to-civilian career opportunities centered on both public, as well as private, defense-related interests (Kerr, 1995; Sheldon, 2001).

It is argued, however, that the U.S. military community still contends with factions within its ranks that only give the outward appearance of accepting the infusion of higher education into the lower ranks of its personnel (Sheldon, 1999). Some observers contend that there remains a long-standing rift within the military that centers on the merits of college-level education for enlisted personnel from the perspective of the senior enlisted personnel. The epicenter of this generally acrimonious, and sometimes invidious, circumstance is considered by some to be rooted in the disparity between the level of

education found among most officers versus that which exists within the senior enlisted personnel (Frankle, 2001; Volker, 1997). This potentially negative situation is a concern to many leading members of the U.S. military command, if for no other reason than it has a de facto association with the practice of preference falsification and the consequences of misinformation provided only for appeasement within the military command structure without respect to its validity (Carnevale, 2003; Kuran, 1995; Sheldon, 2000).

To compound the potential long-term damage of this tenuous relationship between command levels, the interactive-intensive leadership models being investigated by the U.S. Army critically question the efficacy of the military's traditional centrifugal span of control structure, particularly as it applies to the battlefield environment (Kegley, & Raymond, 2002). However clear this realization may be at the highest command levels, its impact within the rank and file of the U.S. military in general continues to meet with a relative degree of resistance (Meir & Bohte, 2000).

Some observers see the foundation of the opposing viewpoints of officer versus enlisted educational standards as rooted in the Jacksonian view that a high school level of education fulfills the requirements of the American population in general, and that this supposition extends to non-officer, enlisted ranking members of the military (Rown, 2001; Schere, 2001). This assertion is supported in part by a history of educational public policy reforms that have, in fact, facilitated the democratization of education up to the high school level, but have fallen short by failing to require some level of higher education within population segments that have also had long-standing traditions of filling the lower rank and file of America's military (Clark & Garza, 1994; Giroux, 1981). The outcome has been what some see as an educational gap between the officer

and enlisted personnel within the U.S. military that works to create a lack of communication between officers who have experienced higher education and senior enlisted personnel who have not, with each group holding different perspectives on how higher education works in conjunction with the mission of the U.S. military establishment (Valferde & Castenell, 1998).

The Diffusion of Innovation Process: Familiarity Breeds Compliance

In the genre of diffusion of innovation, one of the key components is the level of empathy connected to the change agent and the innovation community (Rogers, 1995). Rogers elaborates on this theme and includes the concept of homophile: the degree of similarity any set of individuals or groups share. In the diffusion of innovation process, research indicates that the rate of infusion of an innovation is related to the amount of empathy (levels of homophily) shared between near-peer dyads, and associated groups spawned from such dyads. According to Rogers the empathy factor is compounded by the degree of discretionary power available to the change agent, which in turn can be used to either facilitate or inhibit the proliferation of an innovation.

Within the U.S. Army, as with other branches of the military, the senior enlisted personnel form the nexus point from which, based on how they chose to use their traditionally extensive discretionary power, innovations are accepted, or fall into disuse (Cohen & Gooch, 1990; Collier, 1995). To date, most senior enlisted army personnel have little or no direct experience with higher education, and thus are likely to have little or no "empathy" for the underlying importance of higher education within the military mission, and may thus lack the motivation needed to fulfill the mandate related to infusing higher education programs into the lower enlisted ranks under their command.

In summary, where higher education was once mandated only for the officer cadre, over the last twenty years the U.S. Army command has extended this mandate to include an increasingly broader spectrum of personnel throughout America's military force (Driscoll, 2000). The gradual shift toward upgrading the educational requirements of its personnel has evolved at a pace that has created a "generation" of senior enlisted personnel, most of whom were not required upon enlistment, nor encouraged during their careers, to pursue an educational level beyond high school (Efflandt & Reed, 2001; Martin, & Frost, 1999). As a result, many in the senior enlisted cadre lack the experienced-based empathy required to support programs that promote higher education aimed at lower enlisted personnel. This empathy-gap may create a lag in programs that require senior enlisted personnel to operate as change agents within the military environment. The negative implications of this circumstance go beyond empathy for educational advancement, but extend into disallowing senior enlisted personnel from fully understanding the merits of critical thinking associated with higher education (Snider, Priest, & Lewis, 2001).

Sociolinguistics: Language Links Within the Diffusion of Innovation Process

Research in organizational communication supports the premise that self-referencing within sociolects can impede the diffusion of innovation process, but specifying the exact factors that often attends this occurrence is problematic and remains an open area for further inquiry (Hall, 1999). At the end of the late 20th century there developed a hybrid genre within the social sciences that investigated the relationship of communication and social conduct (Fishman, 1972; Hymes, 1974; Kress, 1985; Searley, 1971; Trudgill, 1984; Wardhaugh, 1992). This area of study evolved into what is now

known as sociolinguistics (Crystal, 1999; Mallmkjar, 2001). The sociolinguistic approach

brackets the role of language within a cultural context (Bolton, 1982; Biber, & Finegan,

1983; Finegan, 1994; Matthew, 1991, 1972; Lehere, 1974; Wierzbicka, 1985), and thus

can be used to identify illocutionary phenomena central to the flow of information within

a social system (Milroy, 1986), which in turn can help to assess the linguistic elements

associated with the acceptance (or rejection) of innovations within that system (Rogers,

1995). Although word-of-mouth is considered the most powerful communication mode in

the diffusion of innovation process, no sociolinguistics studies have been conducted to

date to investigate the metaphor as a linguistic vehicle within this process (Allen, 1986;

Anderson, Keenan, 1985; Anderson, 1985; Atkinson, & Heritage, 1984 & Finegan, 1994;

Rogers, 1995).

Sociolinguists see highly stratified organizational structures, such as those found

in the U.S. military bureaucracy, as spawning peer-group identification via a combination

of semiotic and semantic commonalities that form speech communities, which in turn

generate their own specialized sociolect (Finegan, 1994; Lehere, 1974; O'Grady,

Dobrovolsky, & Aronoff, 1993). Sociolinguistic research can be used to explore various

linguistic stylistics, such as the metaphor, used by members of different sociolects, such

as likely exists between army officers and senior enlisted personnel (Fowler, Hodge,

Kress, & Trew, 1979). If conflict exists, it may be linked to sociolect nuances related to

conceptual differences operating within the sociolects of the officer and senior enlisted

cadre populations as they endeavor to communicate fundamentally similar processes

(Cruse, 1986; Edwards, 1985; Francis, 1983). This premise rests in large measure on the

applicability of the coupling of diffusion research investigating innovation reinvention,

and sociolingustic studies that center on sociolect assimilation between speech communities (Rogers, 1995; Blumer, 1969; Boden, 1988; Lee, 2000; Wierzbicka, 1985; Wolfram, 1991).

Conceptual Berms: Routing Communication Networks

Students of the diffusion of innovation and policy process, tend to characterize information as a flowing stream with backwater eddies that facilitate or inhibit the progression of innovations (Baradach, 1995; Rogers, 1995). This centrifugal information process often works to generate self-perpetuating social subsystems that affect both adaptive as well as maladaptive innovations, which in turn impact the larger amalgamation of other subsystems that synergistically compose the larger overall system (Rogers, 1995). Within the diffusion of innovation research genre this phenomenon contributes to what is referred to as "innovation reinvention"— the process sociolinguists understand as sociolect ideational reconfiguration. Over time this process of lexical assimilation often evolves into a transmutation of meaning that can become sociolect-specific (Finegan, 1995; Marion, 1999; Rogers, 1995). Ideational reconstitution of terms and phrases between sociolects is considered a worthy area of study into understanding social miscommunication that occurs when transferring even fundamentally similar processes. It is argued that this dynamic may be due in large measure to lack of lexicon clarification supported by social speech conventions that support semantic ambiguity between sociolects (Finegan, 1995; Matthew, 1972; 1991).

Sociolinguistic research has drawn the attention of diffusion of innovation scholars who suggest that sociolect variation, and the levels of ambiguity inherent between them, is a key factor in the innovation implementation phase (Prince, 1998;

Romaine, 1988; Scheafer & Lamm, 1995). Although the evidence is sparse, some students of public policy suggest that policy implementation programs are affected by how they are introduced, be it either a priori or de facto from the perspective of the system they ultimately impact. Some debates exist that argue policies established to anticipate or alter an existing maladaptive status quo (a priori) tend to meet more resistance than polices set in place (de facto) to stem the negative impact of socially recognized maladaptive processes. Students of public policy put this phenomenon in terms of policy that developed. On both sides of this debate language is considered to play a major role in the perception of how public policy is introduced (Dunn, 1994; Kingdon, 1995; Theodouluou, 1995). There is no reason to suspect that this same phenomenon is likely to operate differently in the local, state, and federal educational-related public policy agenda-setting and implementation arena (Fowler, 2000; Gray, 1996; Marconis, 1999).

Rogers (1995) outlines five stages in the innovation process within organizations. These include: agenda-setting, matching, redefinition/restructuring, clarifying and routinizing. Although each of these phases plays an interlocking role, it is redefinition/restructuring that centers specially on language. Rogers defines redefinition and restructuring as where the innovation is modified (re-invented) to fit the organization and its composite subsets. Within the study of sociolinguistics there are specialists who investigate lexical-based and semantic differences operating within various language stylistics such as the metaphor, and who point out how language creates semantic nexus points that channel information toward or away from other sociolects (Lehrer, 1974; Ortony, 1979; Seale, 1971; Wierzvicka, 1985). Although language stylistics in general,

specifically the metaphor, has been explored in the context of organizational communication (Putnam, Phillips, & Chapman, 1999), the metaphor as a platform for inter-sociolect communication has yet to be mated with the concepts underlying the diffusion of innovation model. It is likely that within this miscommunication conflux opportunities for superimposing vagueness and ambiguity conflict with the potential of more clear, surmised concrete (and therefore consensual) understanding regarding the role of higher education training in the Army mission.

Contribution to the Field of Education

In recent years, the continuing democratization of higher education has been infused into the professional development programs of the U.S. military. The present research explores how one of these programs (specifically the Army's ACES program) is being received and interpreted within the U.S. Army's view of its mission from the perspective of the officer and senior enlisted cadre.

No research exists to date that has specially broached the linguistic stylistics of the metaphor and the U.S. Army's efforts to infuse higher education into its mid- to lower-ranking enlisted personnel professional development programs. Therefore, the purpose of this study is to fill this void and provide practical information that can be used to develop a better understanding of how the concept of higher education is being infused into the broader mission agenda of the U.S. Army. Of equal importance, this study intends to add new information to the growing body of research pertaining to organizational communication.

Statement of the Problem

Over the past forty years many of today's military leaders have come to recognize

education beyond high school as a means for creating and maintaining a military force

capable of successfully coping with the technology-driven battlefields of the 21st century

and beyond. This new emphasis on higher education within the U.S. military reflects an

ongoing transition within American society that some observers contend was sparked by

the events leading up to and following the launching of Sputnik in 1957 that heightened

America's awareness of the global political arena. One outcome of this circumstance has

been a deepening divide between proponents that adhere to Andrew Jackson's notion that

America's educational standard is a high school diploma, and those who support Thomas

Jefferson's idea that the democratization of a college-level education would create a more

broadly informed, critical thinking, and deliberative society.

The post-Vietnam military command made unprecedented technological

advances that aligned American's defense capability to better cope with the 21st century

battlefield. The dramatic success of the Gulf War and the recent Iraq War served to

reinforce the value of this tact. One of the key outcomes of the transition toward high

technology within the military community has been a growing awareness that linked

military success on the battlefield to the merits of some degree of higher education—

particularly those elements that hone critical thinking skills. The U.S. Army, however,

not unlike the larger social milieu within which it functions, is challenged to generate a

cogent rationale that successfully couples perception of higher education, and its

conceptually abstract foundations, to the pragmatic praxis associated with the battlefield

environment. Confounding these conflicting precepts is an organizational history that

tends to negate the validity of any argument supporting the infusion of higher educational standards that would alter the mandate of the military's lower ranking personnel.

The present research is dedicated to uncovering sociolinguistic coupling mechanisms, specifically the metaphor, and their role in the infusion of higher education in the U.S. Army. It is argued that levels of ambiguity connected to inter-sociolect lexicons embedded within sociolect-specific metaphors may impede effective communication between officers and senior enlisted personnel regarding the role of higher education in the overall U. S. Army mission. Information gained from this research is dedicated to the development of how the U.S. military can better infuse higher education into its ongoing professional development programs. The current research will also add to the growing body of knowledge pertaining to diffusion of innovations within organizations. Specifically regarding educational administration, the current research will provide additional information to assist in the inter-organizational communication networks that likely separate the speech communities within the officer and senior enlisted personnel in the dissemination of higher education programs within the U.S. military in general, and in the case of the present research, the U.S. Army in particular.

Research Questions

The proposed study is designed to answer the following overarching question: Within a U. S. Army installation, what are the possible semantic misinterpretations that may surround various metaphors used between officer and senior enlisted cadre during the infusion process associated with encouraging lower-enlisted personnel to engage in the Army's ACES professional development program? The proposed study addresses the following sub-questions:

1. What metaphors do military officers use to describe the ACES program when they communicate with the senior enlisted cadre?

2. What metaphors do military officer cadre use when communicating with senior enlisted cadre to describe how higher education serves lower ranking enlisted personnel in their role in the overall Army mission relative to developing critical thinking skills within the increasingly technologically sophisticated combat environment?

3. What metaphors do military officers use to describe the ACES program when they communicate with senior enlisted cadre?

4. What metaphors do senior enlisted military cadre use when communicating with officers to describe how higher education serves lower ranking enlisted personnel in their role in the overall Army mission relative to developing critical thinking skills within increasingly technologically sophisticated combat environment?

5. What, if any, lexical argots exist within officer and senior enlisted sociolects that may create semantic misinterpretation of metaphors applied to the ACES program and its role within the U.S. Army? That is, how do officers and senior enlisted personnel interpret their respective metaphors?

<div align="center">Conceptual Framework</div>

One application of sociolinguistic research is the description of unique semantic properties found within various speech communities. Among the linguistic characteristics of speech communities are sociolects within the general population that, although associated with the larger speech community, have language usage patterns containing specific meaning within the context of their social setting. Because sociolects

often share a lexicon that has denotative congruency within the broader speech community, there exists some degree of communication between sociolects. Every sociolect, however, has a set of argots that has specific intra-sociolect semantic connotations that differ in meaning from similar terms/phrases found within both other sociolects. The ambiguity found embedded in stylistics such as the metaphor within sociolect-specific argots can contribute to inter-sociolect miscommunication. The conventions of speech centered on levels of ambiguity allowed within stylistics, such as metaphors, are considered key to underlying (intentional or not) miscommunications between marginally homophilous, and even contentious, subcultures.

Diffusion of Innovation: The Language Link

The diffusion of innovations model of communication delineates a progression of communication stages within which information regarding innovations is transmitted through a social system. Diffusion of innovation research suggests that the success or failure of any given innovation often rests with the ability of the change agent to convey a generally positive predisposition toward an innovation. As both change and implementation agents, senior enlisted cadre, who potentially are negatively predisposed toward higher education, are placed in a potentially incongruous position of providing a crucial communication link to the target population of educationally disenfranchised and/or learning challenged groups residing in the military community. This circumstance may be further confounded in light of evidence suggesting that the lower ranking personnel may themselves have some trepidation toward, or even deep negativity regarding the value of higher education. Adding to this is the potential that lower ranking personnel often enter the military service as a result of being unable to meet the

educational skill requirements needed to succeed in higher education and/or do not have the familial or peer group support that encourages seeking means to acquire such skills.

The model below (Figure 1.) demonstrates the relationships between intra-sociolect metaphor usage and ambiguity within a larger speech community, compounded in complexity by influences generated from even larger speech community populations. The model shows how metaphors tend to be less ambiguous (fewer sociolect-specific argots) the closer they merge toward the nexus point where the sociolect and larger speech community engage in the communicative act. It is at the point of communicative convergence that the sociolect and speech community tend to experience reductions in the occurrence of semantic ambiguity and miscommunication. The same dynamics described in this model hold for clusters of sociolects interacting as subsets within a larger (even overlapping) speech community sphere such as that found in the adoption categories outlined in the diffusion of innovation model.

Significance of the Study

Never in the history of human society has the level of sophisticated, highly complex technology been applied in the field of battle as has been experienced in recent years. As a result, the level of critical thinking skills demanded of the modern-day frontline enlisted combatant closely embraces those required to successfully engage in higher education. Contributing to this circumstance is not only the expanding complexity of ground, sea, and air combat equipment used in present day warfare, but the recognition

Figure 1

Speech Community Metaphorical Convergence Model

Speech Community Metaphorical Convergence Model (G. Kehr, 2003)
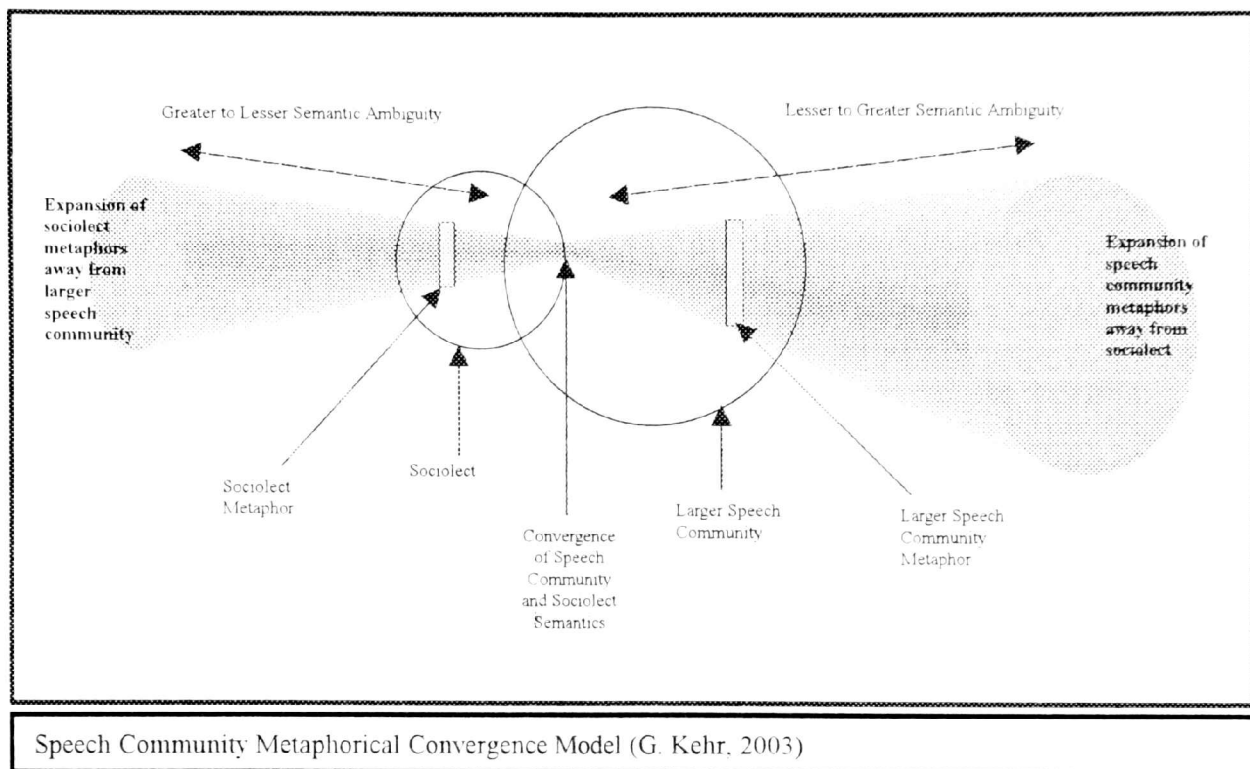
that this new era of technology has created responsibilities attending in-field intelligence-gathering capabilities, requiring levels of critical thinking skill never before demanded of lower ranking combatants in the history of warfare.

Over the last decade virtually every element in America's military arsenal has established extensive programs that encourage its personnel, at every rank, to pursue continuing educational opportunities aimed specifically at attaining some level of higher education. However, since the mandate to incorporate higher education into the military is a departure from traditional military culture, there exists the possibility of a long-standing rift within the military command levels regarding the merits of this newly evolving personnel training mandate. Of the various communicative vehicles available for infusing higher education into the ranks of the lower enlisted personnel, the metaphor is considered among the most frequently employed due in large part by many students of sociolinguistics as a means of conveying unfamiliar concepts by way of connecting attributes of similar concepts; a process commonly employed in cross-culture communication. To date, however, there has been no research directly connecting the diffusion of innovation process with the linguistic stylistic of the metaphors used by officer and senior enlisted personnel as they attempt to convey their perception of the role of higher education in the U.S. Army mission.

The present research needs to be brought to the attention of several key factions within the United States government. Funding dedicated to higher education programs such as the Navy's Program for Afloat College Education (PACE) and the Army Continuing Education System (ACES) confirms the support of the American government for the infusion of higher education into the lower ranks of the military. It is argued that

the information derived from the present study would help create a level of awareness concerning the problems confronting the infusion of higher education programs into the military and those bodies of government chartered to oversight the efficacy of these infusion programs by providing insights into a potential impediment that may confront their dissemination.

It is suggested that this research be brought to the attention of the Congressional Committee on Military Affairs and Appropriations, as well as top command officials within the Pentagon to create awareness that policy agenda mandates are potentially confronting sociolect conflicts that if uncovered, can possibly be resolved. The directors of programs such as the PACE and ACES should not only receive copies of the present research, but should be briefed in detail regarding how this research might be applied to the development of communication programs aimed at promoting higher education within their respective purview of responsibility.

At the military base level, a summary of the present research should be made available to both officer and senior enlisted base command, and distributed to both officer and senior enlisted battalion and company commanders. It is felt that by doing so would create a heightened level of awareness to the possibility of miscommunication between officer and senior enlisted command levels regarding the merits of higher education and the overall military mission. Although there exists sparse formal research as evidence that there exists a communication impasse within the military rank levels regarding the efficacy of higher education, the possible magnitude of this circumstance is attested to from personal experience of this researcher.

Researcher's Observation: The Subtleties of Discretionary Power

In the late 1990s, the researcher served as a civilian academic professor assigned to the Navy's Program for Afloat College Education (PACE) and witnessed first-hand the invidious intensity that often arose between key members of the officers and senior enlisted personnel regarding the on-site implementation of PACE. The researcher saw how the dissention between officer and senior enlisted ranks worked to impede the implementation of PACE, which in turn often demoralized those enlisted personnel who were unable to fulfill a personal objective: they had enlisted in the Navy to obtain the college education that they were unable to secure as civilians. A recruitment promise had been broken. As a combat veteran of the U.S. Army having served with the 173rd Airborne Infantry Brigade (Sept) in Vietnam, the researcher could see the potentially dire consequences such deeply held resentment could have on the combat readiness of our military force.

Over the years the researcher has come to understand that the command channel communication rift that was experienced in PACE is not unique to the Navy: the role of higher education and the military mission are not uniformly mated in the minds and hearts of many members of the officer and senior enlisted commands in most branches of America's armed forces. With the advent of more mobile information delivery systems America's military command has the capability of expanding higher education opportunities to virtually every member of the military. The initiation of the U.S. Army's innovative ACES is a prime example of how advanced information delivery systems are being effectively utilized in providing educational opportunities to a wider range of military personnel. Innovations such as the laptop computer, for example, now allow

personnel with high mobility and remote duty station requirements to secure more consistent continuing educational programs.

Based on experiences related to PACE, however, the researcher concludes that a communication rift may exist between Army command channels that may be reducing the positive potential of the ACES. One outcome of such a communication rift is possible lack of uniformity in the delivery of higher education to those members of the enlisted personnel who desire to obtain a college education, an outcome that could impede the technologically dependent warfare environment, endangering the U.S. Army's mission and U.S. national security.

Procedures

To accomplish the intended research objective a two-tiered, qualitative descriptive sociolinguistic (discourse) analysis will be designed to uncover judgmental heuristics expressed in metaphors used by different sociolects within the U.S. Army command structure. The model of this research reflects a combined discursive phenomenological and ethnographic approach (Corsen, 1995; Frankfort-Nachmias & Nachmias, 1996; Glesne, 1998; Marshall, & Rossman, 1999; Milroy, 1987; Putman, Phillips, & Chapman, 1999; Searle, 1971).

Several means of sociolingusitic analysis are available. Until recently phonetic (intonation) indicators were not extensively used (Malmkjaer & Anderson, 2001). Yet, such indicators have long been recognized in sociolinguistic research to often convey sarcasm, and negative innuendo that may be overlooked within lexicon-only research (Hyman, 1975; Matthew, 1972). Recently developed research tools allows investigators to better understand the organizational innovation adoption processes and the role of

metaphor as a positive and/or negative communication modality in the information exchange process regarding the infusion of higher education in the Army.

Advanced research technologies that allow for discourse analysis are now available to provide insight into this complex area of human communication, and enable researchers to sort through the ambiguous-intensive nuances of human speech (Duranati & Goodwin, 1992). The primary value of this technology is that it provides the elongation of phoneme separation and the discernment of word compactions during the analysis of audio taped dialogue. This technology is widely used in courtroom dictation and allows for the analyst to sort out differing lexical nuances that operate between intersecting speech communities such as argot innuendo embedded in metaphors (Atkinson & Heritage, 1984; Brown & Yale, 1983; Kress, 1985).

In the present research, this newly developed technology may help provide insight into judgmental heurists used by differing command segments within the U.S. Army at Fort Gordon, Georgia regarding how they express (from their sociolect) what constitutes an appropriate level of formal education relative to their understanding of the overall military mission. Several tiers of both officer and senior enlisted command will be interviewed, as each is involved in implementing the ACES and other educational programs dedicated to low-ranking enlisted personnel.

A quota sample based on the availability of selected personnel from the officer corps and the senior enlisted cadre will undergo tape-recorded in-depth interviews. These interviews will focus on culling out the metaphors used within differing sociolects to convey the concept of higher education and its role in the military mission. The quota sample size of five officers and six senior enlisted personnel interviewed was intended to

reflect the disparity within the target populations between officer and enlisted interviewees and reflects the command structure ratio of the unit provided by the U.S. Army for this study. Individual interviews will be approximately one half hour in duration and will follow a pre-formatted query question schedule (Ferguson, & Heath, 1981).

The data gathering procedure will incorporate a two-tier discourse analysis procedure (Brown, & Yale, 1983; Coutlhard, 1985; Marshall & Rossman, 1999; Milroy, 1987; Prince, 1988). A content analysis of (a) differences and similarities of metaphor conceptualization and argot used to express perceptions of higher education within officer and senior enlisted command structures; and (b) differences and similarities of metaphor conceptualization and argots used to express perceptions of higher education between officer and senior enlisted command structures (Anderson, 1985; Anderson & Keenan, 1985; Bolinger,1986; Corson, 1995; Cruse, 1986; Lepschy, 1982; Matthew,1973; 1991; Wierzbicka, 1985; Wolfram, 1991).

The objective of the second discourse analysis phase is to ask respective populations (officers versus senior enlisted cadre) how they interpret the argots and metaphors applied by the opposing sociolects' perceptions of higher education. The underlying purpose of the double tier discourse sample is to determine similarities and/or differences in how the officer and senior enlisted sociolects perceive and communicate their respective perceptions of higher education and its place in the overall military mission (Allen, 1986; Biber, & Finegan, 1993; Collier, 1995; Leech, 1981, 1983; Lehere, 1974; Ortony, 1979; Palmer, 1981; 1983; Slobin, 1979).

Assumptions

A primary assumption is that there exist differing metaphor applications between officer and senior enlisted personnel regarding how they communicate the concept of higher education and its application within low enlisted ranking personnel relative to the overall U.S. Army mission. It is also assumed that the interviewees will be candid and will not engage in preference falsification during the interview process. Due to the impact of regional dialect variation it will be assumed that the information gained from the interview process may be to some degree restricted to the Fort Gordon military command community. However, there exists the possibility that the restrictive contingency of regional dialect will be reduced by the military's policy of intermixing cross-section regional populations on a continuing rotational basis within (three year) time periods.

Limitations of Study

A state of post war unrest presently exists in Iraq involving America and its coalition membership. As a result, the Fort Gordon army base may allow only a narrow margin of civilian access to its facility and thus create restrictions on access to some personnel who would be otherwise participating in this study. This circumstance may hamper access to some direct combat-dedicated personnel, such as infantry, armored unit commanders, and their senior enlisted cadre. Every effort will be made to gain access to these command units to answer key research questions.

Delimitations of the Study

The participants of this study will be limited to available personnel from one U.S. Army base, Fort Gordon, Georgia. Fort Gordon is presently active in higher education projects with various public and private institutions within the southeastern Georgia

region. This circumstance may create a more positive attitude toward higher education,
than if this study were undertaken on a U.S.Army base that was not aggressively active in
its efforts to engage its personnel in higher education. It is likely that there exists a more
congruent lexical environment at Fort Gordon between the officer and senior enlisted
cadre due to the proximity of, and close organizational relationships that formally exist
with institutions of higher education and the Fort Gordon command structure overall.
Because of this close-knit interpersonal interaction there is the likelihood of a narrow
conceptual gap between officer and senior enlisted personnel that in turn may reduce
sociolect differences in lexical ambiguity and metaphor interpretation between the
interviewees.

Definitions of Terms

Act sequence: A component of the speech situation, which includes the content and form
of speech.

Argot: The language of any social group whose members want to conceal the content of
their communication from some other group.

Cognitive style: The way in which we are predisposed to process information in our
environment.

Cohesive device: A speech act device that establishes a connection among two or more
elements in the discourse.

Communication strategy: A strategy that serves the communicative needs of both a
second language user as well as an actor attempting to cope with differing sociolects.

Conversational implicative: A conclusion about the speaker's intended meaning based on
the "rules" of conversation such as the Cooperative Principle.

Conversational maximums: Social convention-bound guidelines to satisfy the orderliness and predictability of human communication. Cooperative Principle: A principle used in communication and according to which an utterance is assumed to be informative and relevant in the context of the communication situation.

Creative (use of language): A characteristic of human language that allows novel and innovative responses to new experiences and situations.

College level education: A denotation of a level of education attained from an educational institution that grants academic degrees; a college is a division in a university that offers a general four-year course of study leading to the bachelor's degree.

Dialect: A regional of social variety of language characterized by its own phonological, syntactic, and lexical properties.

Discourse: A set of utterances that constitute a speech event.

Discourse analysis: The study of the organization of texts and parole, ways in which parts of texts and parole are connected, and devices used for achieving communicative structure.

Discourse markers: Sequentially dependent elements that bracket units of spoken communication (e.g., well, you know, etc.).

Euphemism: A word or phrase that is less direct than the taboo word it replaces and is considered to be more socially acceptable (e.g., passed away for died).

Homophily: A condition denoting similarity in cultural/sociolect background.

Heterophily: A condition denoting dissimilarity in cultural/sociolect background.

Illocutionary act: An act that is performed by the speaker by virtue of producing an utterance (e.g., promising, commanding, arresting).

Intension: A word or expressions social (consensual or inherent) sense for the concept(s) being evoked (e.g., the intension of Prime Minister of Canada is "leader of the majority party in parliament").

Intonation: Movement of pitch that is not related to contrastive differences in the meaning of forms; often used to express differences in meaning within the speech act context.

Language: A human communication system that is usually distinguished by mutual understanding or sociolect boundaries.

Language contact: Interaction between speakers from different speech communities and/or sociolects.

Lexical ambiguity: A situation in which a single form has two or more meanings (e.g., a trunk is a "piece of luggage" or an "elephant nose").

Lexical category: An open class of words distinguished on the basis of its semantic and combinatorial properties (e.g., noun, verb, adjective).

Lexical diffusion: The process whereby a linguistic change manifests itself first in a few words and then gradually spreads through the vocabulary of the larger speech community.

Lexicalization: The process whereby concepts are encoded in the words of a speech community and become specialized within a sociolect.

Lexicon: The speaker's mental dictionary; it contains a lexicon entry for each item in their individuated vocabulary as well as a set of word formations rules.

Locutionary act: A speech act consisting of the utterances of a sentence with a particular meaning.

Metaphor: A language stylistic containing an implied comparison based on the perception of a similarity between distinct objects or actions (e.g., she grasped the idea).

Overextension: A developmental phenomenon in which the meaning of a word or phrase that overlaps with other socilects' application of the same word but tends to extend beyond the specific meaning (e.g., dog is used to refer to other animals as well as dogs).

Pejoration: A semantic change where the meaning of a word becomes more negative or unfavorable (e.g., the meaning of grunt for infantry soldier).

Phoneme: A contrastive segmental unit with predictable phonetic variants.

Phonetic transcription: A type of transcription of sounds where not only phonemic differences but also phonetic details are recorded.

Preference falsification: When a speaker expresses an opinion that is intended to placate the listener (i.e., "Telling people what you think they want to hear").

Pragmatics: The speaker's and hearer's background, attitudes, beliefs, and understanding of the context of an utterance and the knowledge of the way in which language is used to communicate information.

Presupposition: The assumption or belief implied by the use of a particular word or structure.

Prevarication: A property of communication in which the system enables the users to talk nonsense, lies, or engages in preference falsification.

Sapir-Whorf Hypothesis: The hypothesis articulated by Edward Sapir and Benjamin Whorf that the particular language people speak has a shaping influence on the way in which they think and perceive the world.

Semantic feature: The components of meaning that make up a word's intension.

Semantic narrowing: The process in which the meaning of a word becomes less general or less inclusive than its historical meaning within the normative parameters of a speech situation.

Semantic shift: A process whereby the meaning of a word changes in such a way that the word comes to refer to a new, but related, set of referents or concepts.

Semantics: The various phenomena pertaining to the meaning of words and sentences; the study of meaning in language forms.

Slang: An informal nonstandard speech variety characterized by newly coined and rapidly changing vocabulary.

Social network analysis: A method for studying social communication differentiation.

Sociolect: A speech variety spoken by a group of people who share a particular social characteristic (e.g., ethnicity, sex, age, occupation).

Sociolinguistics: The study of various phenomena pertaining to the social use of language.

Speech community: Groups whose members share both a particular language or variety of language and the norms for its appropriate use in a social context.

Speech situation: Social situations in which there is appropriate use language (where shared meaning is conveyed).

University level education: A denotation of a level of education attained from the highest level of educational institutions granting advanced, graduate academic degrees; an academic community composed of several colleges offering four-year courses of study leading to the bachelor's degree.

Summary

The proposed study was designed to answer the following overarching question: Within a U. S. Army installation, what are the linguistic transmutations that may occur between officers and senior enlisted personnel during the idea-transmission process that would affect the concept of higher education as components of the low ranking enlisted personnel's professional development programs? The primary objective of this study was to better understand the semantic differences that may exist during illocutionary acts, specifically metaphor usage, regarding the infusion of higher education in the U. S. Army. It was postulated that given the tendency for the emergence of separate sociolects between the officer and senior enlisted cadre, that the argots and metaphors used in spoken communication between officer and senior enlisted sociolects may create nexus points of miscommunication regarding the role of higher education in the overall U.S. Army mission at it applies to lower ranking enlisted personnel.

The researcher contends that this study will provide insight into the development of more effective communication strategies for the continued infusion of the ACES program within the U.S. Army by exploring the potential miscommunication due to lexical ambiguity and metaphor interpretation between officer and senior enlisted cadre as they operate as formal and informal change agents representing the U.S. Military Command. This study also explored specific communicative elements that may impact the infusion of the ACES program as a vehicle dedicated to providing higher education opportunities to lower ranking personnel within the U.S. Army in general and Fort Gordon specifically. This study was intended to be the first of a series of research endeavors to facilitate the implementation of the ACES program within the U.S. Army

and eventually other related higher education programs to those serving in the U.S. military.

Word-of-mouth is considered the most powerful communication mode in the diffusion of innovation process, and yet few sociolinguistic studies have been conducted to sort out the specific linguistic vehicles central to this process. This study follows a two tier, qualitative sociolinguistic research design that will explore argot and metaphor usage within a convenience sample of officer and senior enlisted personnel who are engaged, either directly or indirectly, in the infusion of the ACES programs at Fort Gordon, Georgia. The sociolinguistic tact of this study stresses the role of language within a cultural context and identifies the linguistic stylistic of the metaphor as an important medium in the acceptance (or rejection) of innovations within a social system.

CHAPTER II

REVIEW OF RESEARCH AND RELATED LITERATURE

Introduction

Overview

It is widely accepted that the launching of Sputnik in 1957 was a significant marker introducing the Information Age into America's social consciousness (Cremin, 1994; Wechsler & Goodchild, 1989). From the late 1950s into the present day the role of higher education has continued to evolve as an important vehicle in the advancement of America's political agenda. Most observers concur that over the last forty years the once disparate goals and objectives of the academic community have become more closely aligned with those of the industrial-military complex (Beck, 1986; Cremin, 1994; Gray & Jacob, 1996; Hastedt, 1997). The academic community's once distinct dedication to generating knowledge for its own sake has come to terms with the private and government sector's need to apply knowledge in practice (Kerr, 1995; Rai, Walsh, & Best, 1998). Among the social institutions impacted by the merging of academic objectives and the needs of national defense-related industries, is America's military establishment (Driscoll, 2002; Sheldon, 2001). Pursuing the military-education connection into the U.S. Army, research indicates that the Army command is not only keenly aware that warfare has become increasingly more technology-driven over the last ten years, but has proactively engaged this circumstance by upgrading its educational

standards (Efflandt & Reed, 2001). A prime example of this is the Army Continuing Education System (ACES) initiated in July 2000 (Dana, 1999).

Efforts to implement programs such as ACES on the part of the U.S. military command, however, have met with some resistance. Not all members of the military consider higher educational programs as a necessary addendum to its professional development and training regimen (Sheldon, 2000). One conjecture is that the senior enlisted personnel who have not been exposed to, nor required to engage in higher education, do not fully understand the merits of a college-level education, and may see it instead as more of an indicator of social status that has marginal application to the overall military mission.

Students of military culture suggest that the traditional military rigid, top-down organizational structure is giving way to a more multidirectional, information-exchange intensive, body of loosely coupled specialized operations (Volker, 1997). Support for the separation of education level and command level has been greatly diminished with the advent of increased communication capability on the battlefield between all levels of command. Advocates of raising the educational standards of America's military, believe that this rise is imperative to survival in a battlefield environment that is infused with highly sophisticated warfare technology, a technology that has expanded the discretionary power of on-site decision-making into the lowest, frontline ranks of the U.S. military (Sheldon, 2000). This observation, however, is not accepted throughout the U.S. Army command and continues to meet with resistance by more traditional factions (Moskos, 2001).

Research in the study of diffusion of innovation suggests that within every social body there exists a spectrum of positive to negative attitude toward change (Rogers, 1995). Over the years, Rogers and other researchers contend that within any given social system only approximately 16% of any given social system's population tend to be positively predisposed to change, leaving a remaining 84% holding some degree of negativity toward change. The evidence supporting this contention spans over forty years and literally thousands of empirical studies covering a vast array of subject matter and populations throughout the world (Rogers, 1995). There is no reason to believe that an organization such as the U.S. Army would be any less inclined to follow a similar pattern of innovation acceptance/rejection.

Most research relating to the diffusion of innovation process have examined some dimension of communication networking, but none to date have explored specific linguistic stylistics such as the metaphor as an innovation-conveying platform (Rogers, 1995). It has not been until recently that advances in technology have provided a means of exploring beyond attitudinal generalizations, and of proceeding deeper into the nuances of specific language mediums used to convey information within the diffusion of innovation process. The exploration into various communicative platforms, such as the metaphor, may uncover important insights into how language is used (or misused) as a vehicle between those holding a particular viewpoint regarding the merits of change within an organization. The U.S. Army is considered an excellent focus of inquiry into this topic.

Students of diffusion of innovation contend that communicative elements are affected by near-peer lexicon relationships that in turn work to sustain, or create,

homophilous social networks that link entire social systems in a matrix of more to less acceptance of any given innovation (Rogers, 1995). According to Rogers, a key factor in the diffusion of any innovation is the amount of empathy the change agent has relative to the application of the innovation to the target population. Rogers further contends that diffusion of innovation researchers argue that unless individuals within a social system have some experienced-based empathy with a particular innovation they are impeded in their ability to act as change agents.

The officer-senior enlisted differences regarding education may exist to a higher level in the U.S. Army then in other branches of the U. S. military given its propensity to reflect within its ranks populations that have a history of being educationally marginalized (Dana, 1999; Driscoll, 2000). Some observers suggest that the consequences of highlighting higher education infusion into all levels of the Army's officer and enlisted cadre will not only serve to create a more academically upgraded fighting force with enhanced critical thinking and decision-making skills, but implies that a more "educated" military force overall will positively impact the functional operations of the future military's command and control structure (Ebberson, 1996; Efflandtd & Reed, 2001).

In an organization that operates within a "loose coupling" environment, the tenets of a flexible leadership-followership enterprise are likely optimal (Weick, 1995). Most students of organizational communication agree that the "loose coupling" model also applies to rule-bound Weberian-type organizations (Putman, Phillips, & Chapman, 1999). Those that make this observation contend that bureaucratic organizations are not static, but instead operate within an undercurrent of discretionary power (Dougherty, 1999;

Bacharach, Lawler, 1981; Barkow, Cosmides, & Tooby, 1992; Henderson & Hawthorne, 2000). Students of diffusion of innovations ask, what if the discretionary power of those mandated to disseminate an innovation is predisposed to undermine the implementation of the innovation? Jefferson may have answered this query by asking those involved in the innovation infusion agenda-setting process to revisit his thesis of an informed leadership-followership formula, or even the possibility of an informed fellowship model of decision-making participation. Recent developments aimed at building a more college- and university level educated Army give every indication that both of the questions posed above are being vigorously broached by America's armed forces.

Communication Theory: Foundational Footing

The work of Ludwig Wittgenstein (1922, 1969) provides a starting point for gaining a communicative perspective of society. When Wittgenstein first published Tractaus Logico-Philosphoicus in 1922, its foundational premise posited that knowledge-building was an ongoing social endeavor, and that description of case comparisons is to be privileged over grand theorizing. A key element of Wittgenstein's perspective centers on the validity of individual experience as having primacy over socially imposed suppositions that might undermine an immediate personal interpretation (description) of any given circumstance. Popkin (1999) dismisses Wittgenstein's detractors, contending that Wittgenstein's insights bring to the fore the dangers of using abstract concepts as validation of other abstract concepts. Popkin writes:

> By 'description' [Wittgenstein] means an accurate, nontheoretical depiction of some situation or group of situations in which language is used in an ordinary, everyday way. It is these situations and the linguistic employments they embody that are the elements of the world to be described. This everyday world—its practices, institutions, and linguistic uses—is the site of what [Wittgenstein]

> calls 'the language game.' His [philosophy] thus turns on three features: an appeal to everyday language, an appeal to a gambit of cases and the context in which they occur, and an appeal to human practices (1999, p. 636).

Wittgenstein's view tends to support a means to mitigate what Hall (1999) and other students of organizational decision-making see as the potential dangers of reality-distortion inherent in "groupthink" (Janis, 1973). Watkins' (1971) review of the history of science, the insights of Popper (1992), as well as Kincaid's (1994) work, suggest that when taken to its extreme David Hume's (1711-1776) assertion that cause is essentially concomitant concurrence tends to support the modernist position which advocates linear synergism. What has been termed the modernist perspective highlights the progression of clustered events that imply causality; this is a view point, however, that tends to discount the potential for a revised normative paradigm resulting from reflection upon the validity of anomalies (Cohen, 1985; Kuhn, 1971; Marion, 1999; Miller & Fox, 2001).

The postmodern genre supports Wittgenstein's context-centered thesis from the perspective that the tenure of "understanding" in any social context is fundamentally ephemeral (Blumer, 1969; Martin, 1994). From this position, "truth" is highly transitory, and thus would limit any manifestation of individuated control beyond speculation of probable outcomes in any given social setting (Berger & Luckman, 1967; Ellis, 1994; Edwards, 1985; Gumperz, 1982). The term "speculation" here is of central importance when put in the context of the extent of information base. Advocates of higher education often cite that one of the merits of democratizing higher education is the broadening and deepening of background information that goes into the development and broadening of inter-sociolect, and ultimately societal-wide, judgmental heuristics (Kuran, 1995; Newman, 1994; Payne, 1994). More directly, advocates of the increasing democratization

of higher education point to its curriculum agenda as a forum for developing critical thinking skills within a fluid, information sharing, social environment (Alvesson, Stanley, 1991; Hall, 1999;O'Banion, 1997). Fiedler's (1964) notion of Contingency Theory and Marion's (1999) delineation of Chaos and Complexity theories provide prime examples of how the precept of information's transitory qualities has found its way into both the organizational and education leadership genre.

As an expression of Enlightenment era values, Jefferson's desire to democratize higher education incorporated the notion that knowledge is an end in itself and it valued critical evaluation of unquestioned suppositions (Ball & Dagger, 1991; Goodchild & Wechsler, 1989). From a postmodern mindset, knowledge is a byproduct of continuous inquiry that has intrinsic value for futures yet unimaginable in the present day (Berquist, 1993; Borgason, 2001).

One example of how Fiedler, Marion, and other postmodern thinkers have impacted what some observers of higher education see as the cultivation of Jeffersonian critical thinking skills, is in the way information gathering and dissemination are seen as inherently marginal, that decision-making is always set against choices of least unacceptable alternatives—the notion of optimizing the potential positive, from potentially problematic outcomes (Slattery, 1995; Gannaway, 1994). This mindset is considered by some to impact higher education curriculum agenda in several ways, the first is the importance of engaging information assessment as an ongoing, positive opportunity-seeking, critical thinking process. The second is the awareness of (and need for) transferring abstract conceptualization in real-time circumstances that require mindset schema to maximize positive/negative outcome potentials. Lastly is critical

thinking skills, these skills center on learning how to delay premature decision-making that take into consideration alternative consequences, that include both potential intended, as well as unintended, outcomes within a limited information availability environment (Fox, 1998; Miller, Hickerson, Wilson, 1999; Negel, 1994; Senge, 1990).

When education is seen as a flowing stream of information that gains impetus from multiple sources, the over-generalized information bits that often characterize a high school level curricula tend to lose validity over time, and in the reality of the "present" detract from, instead of facilitating, the project of social risk reduction (Beck, 1986; Laurillard, 1997). This perspective sees the act of top-down information dissemination as a post hoc contrivance, and not the expression of any one individual's viewpoint. Top-down information dissemination is not an enduring event, but rather is a conceptual marker used to delineate a transitory epicenter for conflict-in-process between multiple actors engaging in the continuing structuration of society (Fox & Miller, 1993; Giddens, 1984).

Those who support the merits of broadening the spectrum of higher education also tend to value continuous information reformulation (Boorstin, 1986; Cohen, 1986; Hoyle, 1995; Marion, 1999). In recent years scholarly discussions have expanded the wide range of learning theories (Bigge & Shermis, 1998) and philosophical suppositions that underlie this point of view (Reed & Johnson, 2000; Watson, 1971) as they are applied within the higher education setting (Eisnor, 1994; Kerr, 1995). The essence of this point of view supports a key assertion of those who argue for the proliferation of higher education: high school provides a foundation of knowledge, and higher education builds upon that foundation to add the component of life-long learning, the basis for the development of

critical thinking skills. Regarding the present study, the motivation or life-long learning

and the cultivation of critical thinking skills, is considered by many to be essential in a

battlefield environment where "leadership" is often situational-specific, but the decision-

making responsibility that attends such a designation is universal (Eisnor, 1994;

Gannaway, 1994; Hoyle, 1995; O'Banion, 1997; Resta, 1994; Stambler, 1997; Slattery,

1995; Tishman, Perkins, & Jay, 1995).

Rogers (1995) and his co-researchers see individuated leadership as transitory and

coupled within the framework of group-processed, consensual information processing

(Burt, 1982; Coleman, 1995). From this perspective, individuated leadership is viewed as

a forum for opinion-expression transmitted by an individual (or group) within a narrow

spectrum of both time and information availability (Boden, 1988; Bryman, 1999).

Therefore, information gathering and disseminating and its agent(s) are essentially

doublets supporting the challenges of social change inherent in the adaptive imperative of

human society (Fowler, Hodge, Kress, & Trew, 1979). This latter insight supports

Rogers' (1995) position regarding the pivotal importance of level of empathy change

agents toward the innovation within the diffusion process.

The research surrounding the characteristics of change agents in the diffusion

process works to buttress Jefferson's vision of democratization of higher education, if

only to the extent that "more is better" when it comes to the gathering and dissemination

of information to meet the needs of society. Change agents are characterized as being

more educated, and as a result having a broader worldview. Most importantly, change

agents generally have a high tolerance for (empathize with) innovations that have at least

some potential of creating a positive social outcome (Rogers, 1995). Most proponents of

higher education see the skills imbued in Rogers' characterization of change agents as fundamental requirements as deeply embedded in college and university level curriculum expectations (Eisnor, 1995; Cremin, 1995 Fowler, 2000, Fox, 1998; Gannaway, 1994; Gardner, 1983; Henderson & Hawthorne, 2000; Kahne, 1996; Lucas, 1994; McNeil, 1996; Tishman, Perkins, & Jay, 1995). In support of the view that more is better regarding education, Beck (1986) suggests that key to the success of any social order is a willingness on the part of its actors to maintain a constant state of social value assessment in the face of ever-unique, self-generating social circumstances.

The vision of widening the spectrum of social actors engaged in information gathering as a central, positive force in the society highlights two parallel, but not often mated, aspects of human association. One is the disenfranchisement of minority actors by elitist actors in the information dissemination process. The other is the resistance on the part of peripheral actors to absorb information provided by dominant actors (Alvesson & Stanley, 1999; Bourdieu, 1994; Brown, Cervera, Johnson-Bailey, 2000, Buenker & Ratner, 1992; Burdin, 1994; Dahrendorf, 1995; Beck, 1986; Fraser, 1996). Expanding on Habermas' (1995) notion of rational discourse within the public sphere, Fraser (1996) includes in this project the discordant discourse of disenfranchised social systems that are intent (for their own survival) on penetrating, and thus affecting, the larger (more dominant) social sphere. Minority incursion into the broader social sphere is often framed in neo-Marxist text, where a subordinate (less powerful) social segment engages the more powerful social sphere in the change dialectic (Clark, Garza, 1994; Collins, 1975; Darling-Hammond, 1900; Newman, 1994). In such a characterization, the "minority" actors often cast themselves as an information-challenged out-group being colonized by

the more dominant, normative elite, who cast themselves as a information-functional in group confederation (Collier, 1995; Corson, 1995; Frazmand, 1999; Saville-Trolike, 1989).

Detractors of the elitist position argue, however, that elitists claim their credibility from historical circumstances and tend to dismiss the value of current achievements and paradigm shifts of other contributing factions that make up the entire fabric of the social milieu (Fraser, 1995). It is proposed by some that Andrew Jackson's contention that a high school education is sufficient as an American standard is, at its base, an elitist vision. From Jackson's position, the general population did not need the in-depth knowledge base often associated with higher education, so long as its leaders had attained such an education (Cremin, 1995). Some observers argue that the Jacksonian thesis endures in the form of public educational policy within many states and local communities throughout America into the present century (Giroux, 1981; Fowler, 2000; Stambler, 1998; Rai, Walsh, & Best, 1998).

One justification for the persistence of the elitist span of control project, according to Meir and Bohte (2000), is its connection to commercial interests that are rooted in the early 20th century. Promoted by organizational theorists such as Henri Fayol, Lydol Urwick, and Luther Glick the narrow, top-down span of control thesis was intended to meet the demands of a specialized labor force that drew its direction from within a hierarchical leadership (Cayer, 1996; Gibson, Ivancevich, & Donnnelly, 2000). This early approach to information gathering and dissemination assumed that "[s] uperiors, at the time, probably had more authoritative knowledge relative to subordinates and did not need to vest the discretion in subordinates that is needed in dynamic

situations where [distal] information is crucial" (Meier & Bohte, 2000, p. 131).

Advancing technology, coupled with an unprecedented growth in human knowledge,

altered this circumstance and set in motion a new era of administrative-information

dissemination theorizing within both the public and private sectors of the American

economy (Fox, 1998; Payne, 1994; Peters & Waterman, 1982).

In 1947, Herbert Simon's critique of the top-down decision-making process

focused on what he saw as the restrictions of "bounded rationality." This idea stressed

that decision-making is always confined within the limits of unequal information-input

circumstances. Simon argued that true rational decision-making was a myth in the real-

time world. For Simons and a generation of organizational theorists that have come to

embrace his ideas, the notion of maximal utility in decision-making within a flexile,

dynamic environment is based on "satisficing," where decisions are based on a limited

option of least unacceptable alternatives (Rainey, 2001).

Over the last 60-plus years the elitist position has confronted arguments posed by

the communitarian project that stress the influence of the entire social sphere as a

potential information source and sees all human decisions as artifacts of a summative,

ideational composite (Elshtain, 1989; Etzioni, 1995; Lee, 2000; Goffman, 1994). Some

postmodernists such as Habermas (1995) and Frazer (1995) suggest that information

sourced to out-group actors is an addition to, not an intrusion upon, the status quo at any

given time. Although leadership is often characterized as individuated control over others

(Collier, 1995; Cosner, 1995; Drew & Heritage, 1993; Duranti & Goodwin, 1992;

Edwards, 1985; Fasold, 1990; Northouse, 2001; Smyth, 1989), this perspective fails to

recognize its communicative, social component (Owens, 2000). In this way "leadership"

is removed as an oppositional force, or a controlling agent, and instead is cast as one of many marginalized information-infusion agents clinging to a molting social sphere striving to maintain its adaptive equilibrium (Foucault, 1986; Lee, 2000; Luhmann, 1995).

Münch (1995) and other social observers, particularly students of the diffusion of innovation process (Rogers, 1995), contend that most human societies tend to flourish within an environment that has a positive mindset toward unfolding contingencies that have a high probability of a known positive, versus an unknown outcome. According to Münch (1995) "the success of an individual's actions depends on, is contingent on, the occurrence of specific events that may happen but also may not happen" (p. 275). For Lee (2000), this positive communicative-melding capacity derives from a biosocial system that compels humans to resist annihilation.

Rorty (1991), and those supporting a communication foundation of social structures in general, and specifically communication-bound organizational operations such as Giddens (1987) and Hall (1999), tend to emphasize social choice making as a survival-centered human activity. According to Luhmann (1995) the success of the survival imperative is very much dependent on the extent actors are willing to fold themselves and blend with, the boundaries of other self-referential communication orientations. For many social observers, one important outcome of this movement is a broadening support for a more transformational versus transactional communicative social forum (Henderson & Hawthorne, 2000; McKenna, Feingold, 2003). The Constructivist position such as averred by Mizsel (2001) refers to this circumstance as the

juncture where agency and structure converge, the point where individual limitations to cope with loss of Self can be compressed to meet the needs of the collective Other.

Some observers of educational public policy suggest that the information out groups versus information control group debates are foundational to the dramatic changes in education public policy over the last half century, and have not only re-ignited the Jeffersonian vision of democratizing higher education, but have sustained its viability in the expanding Information Age (Gray, Jacob, 1996; Lewis & Maruna, 1996; Lincoln, 1994; Martin & Frost, 1999; Rai, Walsh, & Best, 1997). There are indications that movements toward a more Jeffersonian vision of public education are underway, and with them an era of dramatic educational reform (Fullan, 2001). Examples of this trend include programs that stress more theory-based and critical thinking-skills for public education as proposed by Eisnor (1995) and Kahne (1996).

Social trends encouraging higher education programs to include a broader spectrum of society have important implications for the present study. One is the expanding platform for both dialogue and positive social adaptation advocated by Habermas (1995), Lee (2000), and Luhmann (1995). This position gathers support from, and provides impetus for, those social forces stressing inclusionary communitarian precepts (Elshtain, 1995; Etzioni, 1995) that oppose long-standing, detail-filtering, top-down information dissemination networks (Frazmand, 1999; Pareto, 1995). Educational reforms that undermine any pedagogical standard (such as that which underscores Jackson's stance) are important to the diffusion of innovation process for several important reasons. Any effort to discredit, or disband, an educational curricula such as those often forming the basis of the high school diploma, is one step in dismantling a

primary impediment to social change. Many educational reformists see Jackson's stance as one upholding an inherent trepidation toward expanding the purview of education into non-normative social models. One such model is the Social Interactionist learning theory (Bigge & Shermis, 1998) that is often paired with critical thinking-generating activities (Maxcy, 1995; Eisnor, 1995). Foundational to this process are those determined to ignite awareness, participation, but primarily, contribution recognition on behalf of marginalized social segments (Frazer; 1995; Foucault, 1984; Justiz, Wilson, & Bjork, 1994; Maxcy, 1995; Rorty, 1991). Such individuals are considered by many to be prime movers of social change in the historical present; they compose innovative margins that embody and spawn what Rogers (1995) refers to as the characteristics of change agents.

Recent public policy overtures extending into America's armed forces that support the Jeffersonian position toward education are a boon for advocates of educational change (Fullan, 2002; Rai, Walsh, & Best, 1997). For students of diffusion of innovations, the notion of change centers on the role and attributes of change agents (Rogers, 1995). From a diffusion of innovations model standpoint the success (or failure) of any innovation dissemination program centers on those individuals that have the discretionary power to impede, or in the least hold in abeyance, the grip of ideational gridlock that attends normative-binding social stasis. Kuhn (1970) and Cohen (1985) address this issue and see accompanying any social change forces that tend to resist normative paradigm hegemony. Although often characterized as social segments, or factions of resistance, students of innovation diffusion tend to see change resistant forces from a one-on-one, word of mouth perspective; it is out of this perspective the individual change agent is viewed as a central figure to the diffusion of innovation process (Rogers,

1995). From a sociolinguistic perspective, the sociolect out of which change agents derive their worldview is a central issue to social interaction in general, and can be argued to be of utmost importance to diffusion of innovation process.

To date, specific linguistic stylistics such as metaphors associated with the diffusion of innovation process have not been fully explored (Rogers, 1995). It is argued that specific linguistic conventions, such as metaphors and the lexical sets integrated into communication mediums such as the metaphor reflect worldview perspectives of the adopter category sociolects. This argument suggests that linguistic stylistics used to convey information associated with innovations may act to impede or facilitate the social change process.

In sum, students of sociolinguistics see society as interconnected networks of sociolects (Finegan, 1995). Diffusion of innovation researchers understand that within the classic information dissemination model are communication networks that spawn change agent cadre in the various adoption phase stages (categories) associated with the infusion of innovations process (Rogers, 1995). Rogers and his co-researchers further assert that there exists a lexical set within each change agent network that supports a communication linkage that operates throughout the entire spectrum of the diffusion model. This lexical connection operating within sociolects if only marginally culturally isomorphic, may provide an important insight into shared value communication links that convey judgmental heuristics that allow exchanges between change agents within and between adopter categories in the diffusion of innovation process.

Education and America's Socio-Political Agenda

Some historians of educational policy consider the post 1950s melding of theory and practice as signifying the death knell of Andrew Jackson's idea that a high school diploma was a sufficient benchmark for the country's educational criteria (Cremin, 1997; Wechsler & Goodchild, 1989). Other social observers note that the collaboration of theory and practice ignited by the launching of Sputnik, served to enliven Thomas Jefferson's vision of a nation founded on the widespread democratization of college- and university-level education (Eisnor, 1994; Fullan, 1991, 2000; Hanson, 1996; Kellner, 2000; Kincaid, 1994; Payne, 1994; Rai, Walsh, & Best, 1997). It is suggested that the departure from Jackson's emphasis on high school reflects the continual expansion of literacy required by the Industrial and Information ages. The libraries established by the Carnegie Foundation, it is argued, were set in place to create a more literate, and thus more productive, workforce (Roberts, 1995). It is an argument that has been applied to the proliferation of the medieval university system that now in an evolved form, covers the globe. The same argument might aptly apply to the socio-economic motivation that initiated the land grant college movement of the early 1900s. It is a perspective that can be extended to the continuing expansion of the community college system that emerged out of the 1960s as well, and in more recent years the rise of computer-assisted distance learning (Boorstin, 1985; 1993; Wechsler & Goodchild, 1989; O'Banion, 1997).

By the end of the 20st century, the merger of academic and economic interests expanded in several parallel vectors. The first of these is the global nature of a world that has grown into a close-knit, communication network with the advent of advanced transportation and electronic technology. Secondly, with the expanded capability of travel

and social interaction, there developed a growing awareness within traditionally

marginalized populations that they need not live out their lives under oppressive, dire

socio-economic conditions. Justiz, Wilson, and Bjork (1994) represent a collective

argument posited by many social observers that the second is a consequence of the first.

Thirdly, this widely pervasive level of social awareness has been supported in large

measure by public policy programs propagated by a growing middle class who have

initiated educational and economic programs aimed at long-term "excluded" populations

(Cremin, 1994; Fullan, 2002, 1991; Hauptman & Smith, 1994; Justiz, 1994; Kahne, 1996;

O'Banion, 1995). Underscoring all of these is the confluence of an expanding economic

and U.S. military's worldwide involvement over the last forty years (Hastedt, 1997).

For those who support America's increased military involvement in world affairs,

their arguments are often aimed at (a) global democratization, (b) the development of

commercial markets within democratized countries, (c) the proliferation of international

communication networks that are fostered between market-driven countries, and (d) the

socio-political stability among nation-states that tends to follow this process (Edwards,

Wattenberg, & Lineberry, 2002; Kegley & Raymond, 2002; Stoessinger, 2001). The

same argument that supports commercial globalization includes the shifting of the

economic dependency of the academic community from site-specific tuition to outside

funding that crosses international borders (Breneman & Anderson, 1993; Fuller, 2000;

Goodchild, & Wechsler, 1989; Kerr, 1995; Rai, Walsh, & Best, 1997; Stambler, 1998).

The once predominant pattern of local, regional, and national funding, according to most

observers of education policy, has expanded into the global, multinational arena. This is

not an American-specific phenomenon, but rather a worldwide, multi-national

undertaking (Hanson, 1996; Kegley & Raymond, 2002; Lewis & Maruna, 1996; McKenna & Feingold, 2003).

According to Breneman and Anderson (1993), Kerr (1995), Blau (1999), and others, several key events led to the present circumstance. The first is rooted in America's near-obsession with the democratization of higher education initiated during the Sputnik era. The second was the mounting socio-economic and political forces that brought this mindset to a crescendo during the mid-1970's. The third are (a) searches for research-based funding that created a highly competitive (commercial) environment within the academic community worldwide and (b), academic governance tactics that supported increasing autonomy of the professoriate as an important vehicle challenged to garner funding on behalf of the academic institution.

Some observers contend that out of this environment has emerged an academic environment that has synergistically metamorphosed into an entity that no long strives to fulfill what once were two widely different worldviews, but has blended its objectives into the objectives of mainstream society (Fuller, 2000; Kerr, 1995). Some argue that what was considered knowledge within the epistemic community has been redefined (for better or worse) to meet the adaptive imperative of the historical present and beyond (Eisnor, 1995; Fullan, 1991, 2002; Kahne, 1996; Miller & Fox, 2001; Rutgers, 2001). In the words of Miller and Fox, " [k]nowledge building [has come to depend] on the background and interests of the epistemic community that is generating knowledge" (2001, p. 668).

In recent years knowledge efficacy has been much discussed, and among those who see expanding the purview of information in order to exchange support educational

reform policy that sees a fusion between the postmodern mindset mentioned above and present day pragmatic practices (Bogason, 2001; Marion, 1999; Stever, 2000). This perspective has developed fairly unified state-centered curricula within most institutions of higher education. This movement continues to serve society's need for information dedicated to both theory and practice (Hawthorne & Henderson, 2000; McNeil, 1996). Some argue that this merger of theory and practice is in real terms a merger of commercial and academic interests operating in concert with America's socioeconomic, and ultimately political objectives (Rai, Walsh, & Best, 1997). The net result, however the route, has resulted in what many observers see as a dramatic increase in the democratization of higher education opportunities for the broadest spectrum of any population in human history (Boorstin, 1985, 1998; Clark, & Garza, 1994).

The Legacy of Abelard: Critical Thinking & Higher Education

Lehman (1995) and other historical linguistics contend that the most human of human attributes, language, both spoken and written, has always been complex. That is, according to Lehman, complex relative to the social milieu of its users. Historians of philosophy (Popkin, 1999) and those that take a wider view of human social development (Boorstin, 1993; Curtin, 1984; Roberts, 1995) support this thesis with what Colman (1995) poses as the justification for a rationalist perspective. To introduce the notion of complex, rationally based thought found in Western philosophic thinking Popkin begins his text with:

> Philosophy is the attempt to give an account of what is true and
> what is important, based on a rational assessment of evidence and arguments
> rather than myth, tradition, bald assertion, oracular utterances, local customs,
> or mere prejudice (pp. 1).

Students of cross-cultural communication argue that what is presently considered Western philosophy is a collage of worldviews influenced by the East and Middle Eastern cultures, primarily the oriental, Egyptian, and Hebrew commercial traders (Boorstin, 1985, 1993, 1998;Curtin, 1984), much of what Western civilization claims as a philosophical foundation. The spread of this knowledge base found its way into the Western scholastics by way of Peripatetics as Peter Abelard (1079-1142) wandering from one academic community to another. According to Boorstin (1993, p.102) [Quoting Abelard]: "By doubting we come to questioning...and by questioning we learn truth. " Abelard is considered an Aristotelian Rationalist, an intellectual lineage that finds its roots ensconced in the mythpoeic tradition of the Gilgamesh, Kumarbi, The Song of Villikummi, and Enuma Elish, all of which, according to Popkin "display a fusion of what we call science, philosophy, and religion..."(1999, p.1). In the words of Miller and Fox (2001):

> Early epistemology assumed that the observer (a) was independent of and distinct from the object being observed and (b) could validate objective reality in a language system called the laws of science. [We argue] that knowledge is responsive to the culture in which it is embedded...Knowledge building, in other words, depends on the background and interests of the epistemic community that is generating [the] knowledge (p. 668).

Fox and Miller's position echo Abelard's legacy into the historical present, and the ages that have passed before; it is a caution against the practice of unquestioned hermeneutics.

Describing how humans may be well advised to reflect on the foundations of the judgmental heuristics that provide guideposts for their reflexive decision-making, Kuran (1995) writes:

> The human mind is capable of perceptual and conceptual feats unmatched by even the most powerful computers. Yet its competence pales in comparison to the complexities of the physical and social environment. The mind can

receive, store, retrieve, and process only a fragment of the potentially useful information....Severe as they are, the mind's limitations are not paralyzing. As Individuals, we overcome them through various means that help conserve cognitive resources.... [W]e take shortcuts in inferring causal relationships, and in estimating magnitudes, frequencies, and probabilities....The underlying simplifying principle is one of several mental shortcuts, or judgmental heuristics (pp.158-9).

For Kuran judgmental heuristics have a decidedly negative side that extends past the tendency to ossify ideation. Kuran sees judgmental heuristics as often not necessarily logically compatible within the worldview of those that use them. Kuran suggests that these "...models [of how the world works] that an individual applies to an issue need not be mutually consistent" (p. 159). This condition generates what Festinger (1957) calls cognitive incongruence that all too often finds justification in what has been termed "groupthink" by Janis (1973), as well as forms of inter- and intra-personal deceit (Bok, 1978). Many social theorists see this phenomenon as foundational to bias and bigotry (Barkow, Cosmides, & Tooby, 1992; Berger & Luckmann, 1967; Maxcy, 1995).

Other social observers contend that incompatible judgmental heuristics all too often can be embedded in the rationale used to generate and sustain illogical, and fundamentally misguided, public policy (Chen & Gooch, 1990; Christopher, 1999; Fox, 1998; Kegley, & Raymond, 2002; Kingdon, 1995; Kuran, 1998; Miller, Hickson, & Wilson, 1999). It is the legacy of Abelard, and those that came before and after him, however, that cautions both the individual and society to be alert to what Goffman (1974) describes as the framing effect of human cognition. Abelard's credo is what Duranati and Goodwin (1992) speak of when they call for the need for continual rethinking of ideas relative to the context in which they are applied.

For Abelard, the purpose of scholarship was to question [nearly all] of one's judgmental heuristics. Further, this was a skill that he and his colleagues were convinced could be taught, not merely an attribute that was, or was not, present in the individual at birth. This view came to represent the universitas societas magistrorum discipulorumque, the guild of masters and students. Over the past fifteen hundred years higher education, the university and its colleges, have come to symbolize the virtues, and more importantly relative to the present research, the attainability of critical thinking skills.

Higher Education: Sculpting Critical Thinking

When Karl Popper (1992) speaks of causality, explanations, and the deduction of prediction, or of theory building, falsifiability, or testability, it is often misinterpreted as being directed exclusively to the Positivist mindset (Popkin, 1995). Although Positivism is no doubt thematic in Popper's work, there is an element that is deeply embedded in his work that can be found throughout the spectrum of what are considered various forms of ontological epistemology (Martin & McIntyre, 1994). That aspect of Popper that connects his work to the stream of other curious humans throughout time is the language of inquiry. More specifically, it is the language of critical thinking (Rubinow & Barry 1999; Tishman, Perkins, & Jay, 1995).

Students of critical thinking skills note that terms such as guess, suppose, surmise, presume, and speculate all connote "to form an opinion based on inclusive evidence" (Tishman, Perkins, & Jay, 1995, p. 8). Tishman, Perkins, and Jay cite some 124 terms that center on what they call the language of a thinking vocabulary. Words expressing speculation, assertion, and support, as well as, concede, deny, deliberate, and believe, are among what Tishman, Perkins, and Jay (1995) refer to as their incomplete representation

of terms that propagate calculated suppositions such as "guess" and "alternative." Each of the words are deeply embedded in colloquial speech and convey some level of wonderment, commitment, or indecision centering on the inquiring spirit of humankind. For Tishman, Perkins, and Jay (1995), Rubinow and Barry (1999), and others that study critical thinking in depth, it is not the words and the mindset they connote that are of key interest, but rather the extent to which humans are trained to reflect upon the meaning imbued in such word work to shape their worldview.

According to Tishman, Perkins, and Jay (1995) phrases like "consider the alternative interpretation" and "providing explanations" (pp. 13-14), are connected to what they call "thinking dispositions" and the skills of "mental management"—all of which fall into the genre of knowledge construction. From a Constructivist view, one's lexical set plays an important role in the development of judgmental heuristics associated with the solution seeking behavior they engage in during the course of daily living (Eisnor, 1995; Kuran, 1995; Popkin, 1995; Wittgenstein (1922, 1969).

There is also what Tishman, Perkins, and Jay refer to as the "know-how" component embedded in words and phrases as well. The know-how notion is what Logical Positivism essentially set forth in the concept of operationalism: the step-wise process that links concepts to sensory (see, touch, and feel) referents. This step of inquiry in the scientific method attaches an idea/concept to what some call "objective" (substantive) reality, or signifies a term or phrase to represent a speculated notion (Boyer & Merzbach, 1991). Students of the philosophy of science such as Cohen (1985), Kuhn (1970), and Münch (1995) suggest that this worldview has become an essential part of the Western socialization process in the 21st century. This pedagogical tact has a long

history. The primary vehicle of the secondary socialization process over the last four thousand years (recorded Western civilization to the Sumerians) has been the formal, public and private, school system (Marconis, 1999). Foundational to these formal socializing institutions is the language of learning (Tishman, Perkins, & Jay, 1995). This assertion supports Wittgenstein's (1922, 1969) contention that reality is a language game whose rules superimpose an order upon the user; language use conventions that are social- and context-bound.

Halliday (1978), and later Edwards (1989), reiterate the point of how language and society are inseparable. In an elaboration of Wittgenstein's work, Egidi (1995) suggests that the human endeavor to codify modes of inquiry is as much the creation of an inquiring language as it is an effort to sustain a momentum of inquiry through language. The physical embodiments in the public consciousness of this evolving task are the world's institutions of higher education, the university and its colleges (Boorstin, 1993; Crimin, 1989,Wechsler & Goodchild, 1989).

Privates Thinking Like Officers: Leadership Vs. Fellowship

Lessons learned from failure in war are eagerly embraced by a progressive military command; future successes often weigh in the balance (Chen & Gooch, 1990). For the U. S. military, the last forty years has been steeped in adjusting to technological advances that are applied to warfare (DoD, FM 34-3, 2002). Among the failures the present U.S. military command is determined not to repeat is the McNamara 100,000 experiment that allowed 100,000+ academically challenged civilians into the military during the 1970s. The lessons of inability to qualify for promised military service occupations, and delayed and repeated training, were among the key outcomes of this

(failed) program (Harrington, 2000). The positive lesson learned, however, has been a reversal of attitude toward coupling education with lower ranking personnel. As the U.S. Army command enters the 21st century it has had to confront an array of new technology that has transformed its information collection and dissemination capability at the very frontline of the battlefield. This circumstance demands of the modern military commander the ability to reconstitute the traditional vision of leadership to fit a more educated military force (Hardy & Clegg, 1999; Masi, 2000; Moskas, 2002).

Since the mid-1980s each branch of America's military has come to incorporate some component of higher education into its ongoing personnel training programs. Most students of military culture suggest that the Gulf War generated the single-most impact linking education to military effectiveness. This single historical event is considered by many to mark the beginning of a truly "new" Army, an army of educated soldiers directing laser-guided bombs (Rown, Scherer, & Dallan, 2001). The first attempt to join education to military personnel in the early 1980s was to entice enlistees with variations of WW II GI bill educational benefits. The outcomes, however, were a high turnover rate and accelerated training costs (Driscoll, 2000). By the mid-1990s change within the military establishment focused on several related levels. One was the development of an organizational scheme that would allow for a series of interlocking, highly flexible operational units. And the other was the creation of educational programs that would provide a pool of personnel capable of keeping apace with America's growing technology-centered military arsenal (Rown, Scherer, & Dallan, 2001). The foundation of these efforts was the recognition that military-specific technology was rapidly developing, and that the level of education demanded of military personnel had exceeded

the bounds of high school and had entered the realm of higher education (Snider, Priest, & Lewis, 2001).

By the late 1990s the Army's educational program expanded to include both advanced technical training for its lower ranking enlisted personnel, and training in the skills of critical thinking and decision-making under stressful conditions. The latter skills, however, are components of leadership ability that transcends traditional military protocols (Sheldon, 2000; Rowan, Schere, & Dallan, 2001). Since the 1991 Gulf War, the U.S. military in general, and the U.S. Army in particular, has worked to modify its traditional Tayloresque, top-down, command-control communication model, and applied instead a more interactive information exchange, transformational model (Burns, 1978; Henderson & Hawthorn, 2001; Owens, 2001; Sheldon, 2000).

The transformational leadership model incorporates a larger spectrum of any given population in the overall decision-making mix (Bigge & Shermis, 1998; Burns, 1978; Gardner, 1983; Gibson, Ivancevich, & Donnelly, 2000; Henderson & Hawthorne, 2000; Marks & Nystrand, 1981; Owens, 2000). The information-centered re-structuring of leader-followership in the U.S. Army and other military branches makes significant strides toward what Borgason (2001) might describe as an interactive, multidimensional approach to the administration required to encompass a vast information network. In the Gulf and Iraq wars the use of computerized, laser-technology provided near pinpoint accurate weapons that aligned Air and Artillery forces with interactive real-time, audio-visual command control technology on the frontline, ground level of the battlefield. Battlefield conditions demanding intensely interactive command-control components are

likely to multiply and continue into the 21st century and beyond (Joddam, Taylor, & Korb, 1993; Shelton, 2001; Volker, 1997).

One of several historical sources upon which the transformational leadership model may owe its foundation is Thomas Jefferson's notion of the democratization of higher education of educational public policy. For Jefferson a strong representative republic was based on an educated polis. Within this vision, leadership was the responsibility of every member of society. It was a vision that supported informed leaders interacting with informed, active citizen participation, which in turn melded into a problem-solving unit of fellowship (Ball & Dagger, 1991; Edwards, Wattenberg, & Lineberry, 2002; Gannanay, 1994; Henderson & Hawthorne, 2000; Kimmerl, & Stephen, 1998).

From a communication theory vantage Jefferson's vision is an information system-based thesis of interactive social governance (Lee, 2000). This perspective sees human decision-making as part of a refractive continuum embedded in both intra- and inter-personal reflection, which in turn, is bounded by context and topic for its interpretation within the meaning-attribution process (Berger & Luckmann, 1967; Edwards, 1985; Gibson, 2000; Lee, 2000; Wittgenstein, 1922). Out of the refractive aspect of human communication evolves the creative element of human language usage that allows for a process of continuous language re-invention fitting within the social structures it supports (Goffman, 1974; O'Grady, Dobrovolsky, & Aronoff, 1993). In recent years this viewpoint has often been portrayed as a systemic dimension of human communication to the extent that it emphasizes multi-dimensional, interactive decision-making as foundational to what has been traditionally cast as unidirectional leadership

(Barkow, Cosmides, & Tooby, 1992; Bryman, 1999; Fox, 1998; Henderson & Hawthorne, 2000;).

An important outcome of the maturing of the Information Age has been the recognition that individuated perspective is an additive feature of group decision-making and that the sum of individual ideas expressed in a social context works to meet the needs of group interests without being diminished in the process (Lee, 2000; Rutgers, 2001). This insight underscores Bourdieu's (1994) assertion that society *is* communication. Students of organizational decision-making that stress Chaos and Complexity theories (Marion, 1999) extend Bourdieu's thesis with the recognition that communication has an inherent ephemeral quality. This viewpoint works to support points of leadership that recognize that information exchange is fundamentally transitory and that decision-making is an interactive—intensely social—undertaking (Goodwin, 1981; Goffman, 1974; 1981; 1994; Sacks, Schegloff, & Jefferson, 1974).

Another important feature supporting the fellowship-centered vision of leadership is the power-sharing dynamic associated with distal-proximal information gathering and disseminating advocated by Foucault (1984) and others. Key to the distal-proximal information gathering and dissemination thesis is the notion of communicative double contingency. According to Luhmann (1995) and Lee (2000) communicative double contingency is the intra- and inter-personal anticipation of potential and ongoing communicative outcomes. Luhmann and Lee see this process as underscoring the self-referencing (adaptive resistant) tendency that often accompanies system equilibrium-seeking behavior.

The central tenant of double contingency is that individuals are embedded—never fully incorporated—entities into what is often characterized as "society." Double contingency is seen as a survival coping feature that works to equalize compromise-stressing communicative mechanisms such as the Cooperative Principle (Duranati, & Goodwin, 1992; Ellis & Beattie, 1996; Fasold, 1990; Finnegan, 1995). Double contingency is seen by Luhmann and Lee as a mitigating mechanism of the tendency of individual and group autopsies—where individual and group self-referencing work to inhibit otherwise positive survival adaptive behavior. Put in yet another context, double contingency can be seen as an operative tenant of Kuhn's (1971) insight into how human society makes heuristic paradigm shifts by finding virtue in the exploration of anomalies.

Educated Soldiers? Smart Bombs?—New Ways Meet Old Ways

In recent years the U.S. Army's Director of Education has created 141 Army Learning Centers worldwide, and manages a budget of over $150 million that supports the ACES's total program and services worldwide. On February 7, 2002 the following [excerpts] were initiated by the Office of the Director of Education, Department of the Army:

> The Army Continuing Education System (ACES) through its many programs promotes lifelong learning opportunities and sharpens the competitive edge of the Army, 2010 and beyond. ACES is dedicated to fulfilling the mandates as stated in our Vision, Mission and Goals.
> Vision
> The ACES is to create and lead the Army's premier education organization committed to excellence in service, innovation, and deployability.
> Mission & Goals
> The ACES mission is to vigorously promote lifelong learning opportunities to sharpen the competitive edge of the Army by providing and managing quality self-development programs and services. (Department of Defense ACES Program, 2002: http:www.armyeducation.army.mil/Vision_Mission.html).

One example underway in the creation of the aforementioned vision and goals is the Army distance-learning (eARMYu) Program offering online education-degree attainment opportunities (Carnevale, 2003). The following indicates the eArmyu objectives, "is designed to enable a new recruit or a veteran soldier to earn a college degree within four years during active enlistment....The program [is intended to serve] 15,000 to 20,000 soldiers [by year end 2003] (DoD, 2000).

Effort put forth by the U.S. Army (and other branches of the U.S. military) to provide college and university level education, however, has met with some resistance within the military establishment regarding the merits of higher education being infused into its lower ranking personnel (Volker, 1999). It has been implied that the epicenter of this communication impasse seems to be a lack of consensus regarding the utility of "higher education" to the overall mission of the U. S. Army command (Rown & Schere, 2001; Sheldon, 2000). However laudable, the proposition of educating enlisted personnel poses several important questions, not the least of which is how to most effectively overcome any resistance from within the ranks of the existing military force (Weimer & Vining, 1990; Weick, 1996; Worthen, Sanders, & Fitzpatrick, 1997).

The ACES program in particular has confronted several, somewhat subtle, impediments. One in particular has been the garnering of consensus between the officer and senior enlisted personnel regarding the role of higher education within the overall Army mission (Rown & Schere, 2001). Students of organizational change and the diffusion of innovation process recognize that often adjoining any "hardware" innovation is a "software" or educational element (Mais, 1999; Roger, 1995). It is argued, however, that over the years since the launching of Sputnik, there has been a fundamental

transformation within American society, and that in spite of any initial resistance from within the military community, the values and standards upon which higher education has been represented over the last twelve hundred years will eventually become an integral aspect of military life (Kellner, 2000; Moskos, 2001; Rai, Walsh & Best, 1998). In recent years the adherence to the development of reflective and analytical skills that has come to characterize higher education is working to transform the fundamental command and control structure of the U.S. military (Sheldon, 1999). To install this innovative educational system has required the integration of communication programs connecting the vast complex of agencies that make up the Departments of Defense and Education, as well as onsite military installations worldwide (Dye, 1998; Rai, Walsh, & Best, 1998; Klinger & Nalbandian, 1998). This effort has not been without its problems, among which are the many cross-cultural communication nuances that weave in and out of every congregation of widely diverse social systems, such as the U.S. Army (Sheldon, 2000).

Among the issues confronting the provision of higher education opportunities to lower ranking enlisted personnel, is not only the subtle (and sometimes not so subtle) resistance from senior enlisted cadre that do not understand the applicability of higher education to the mission of lower enlisted personnel, but also the socialization process (worldview) that accompanies the vast (often socio-economically marginalized) populations that comprise the Army's lower enlisted ranks. The role of the lower enlisted cadre as an important information gathering and decision-making asset has only been introduced during the last ten years. As a result, entire generations of lower and mid-ranking enlisted personnel are not more positively predisposed toward the merits of

higher education than the senior ranking enlisted upon whom they model themselves (Coppa, & Gericke, 2000; Driscoll, 2000; Ebbesen, 1996).

It is common for most innovations to meet with some resistance as they diffuse within a social system (Rogers, 1995). Some observers suggest that there is the potential of resistance within some sectors of the U.S. military regarding the merits of providing opportunities for higher education to the lower ranking enlisted military personnel. This concern stems from what some observers contend is a deep, and long-standing ideological division between those segments of society that still adhere to the practice-over-theory, Jacksonian position rather than the Jeffersonian, theory-over-practice viewpoint (Kerr, 1995; Trow, 1989). Research indicates that this potential negative circumstance may be compounded by the rarity of higher education experience within the cadre of the senior enlisted personnel who entered the military prior to the Gulf War (Efflandt, & Reed, 2001; Franke, 2001; Rown & Schere, 2001; Soeters & Recht, 1998). The majority of senior enlisted personnel presently serving on active duty in the U.S. military have little or no experience with the transformational leadership model that have come to be associated with exposure to higher education (Kane, Tremble, & Trueman, 2000).

Finding a viable means of mitigating the potentially negative conceptual repercussions of how higher education is transmitted between officers and senior enlisted personnel may be key to the success of infusing higher education into the lower ranking personnel training regimen. Backed by literally thousands of studies, the Diffusion of Innovation model demonstrates how information flows through a social system in a series of stages of populations that demonstrate relative degrees of acceptance or rejection to

the introduction of any new information infusion (Martin, 1994). Research indicates that this pattern frequently begins within a minority membership that is introduced to a given concept and/or innovation—an idea that has the potential of becoming a destabilizing factor within a given social system. To the extent that the introduction of the innovation is considered to contribute to the ultimate survival of the system, it is further infused into an increasing body of members within the same population. (Rogers, 1995).

The military status quo within the senior enlisted cadre may be challenged by the introduction of any change to its existing system, and the extent to which it is able to envision the positive potential of higher education infused within the lower enlisted ranks will likely determine the infusion rate of the ACES program (Lee, 2000; Rogers, 1995; Rown & Schere, 2001). Those supporting the democratization of higher education in the military often cite what they see as systemic discrimination by omission that targets marginalized segments of American society (Breneman, Leslie, & Anderson, 1993; Justiz, Wilson, & Bjork, 1994). Although a growing body of evidence suggests that the initiation of Jefferson's vision of democratizing higher education into the military establishment is closely tied to America's national security agenda, it confronts a history that makes its infusion problematic (Gray & Jacob, 1996; Trow, 1989).

Out of this circumstance the question arises: how does one convey the value of higher education as an ongoing functional component within the present and future Army to the immediate and long-range advancement of the organization's overall mission on and off the battlefield? Before this question can be broached it requires a more thorough understanding of communicative models and theories supporting the rationale that increasing levels of education will result in the development of more effective critical

thinking, decision-making and transformational leadership skills—a proposition that first requires a closer assessment of the communicative foundations of leadership itself.

Inter-Sociolect Metaphors: Ships Passing in the Night?

Sociolinguists who study communicative conceptual linkages work to uncover an ever-shifting array of context- and subject-specific communication mechanisms within various speech communities operating in every human society. These linguistic mechanisms often take the form of differing speech register formations, lexical synonym constructions, stylistics such as the metaphor, and other language-related linkages found within and between the various subsets of speech communities (Fowler, Hodge, Kress, & Trew, 1979; Sacks, Schegloff, & Jefferson, 1974; Saville-Troike, 1989; Slobin, 1979; Stampe, 1980; Tomlin, 1996). One application of the sociolinguistic approach in research is to identify the illocutionary phenomena central to the acceptance (or rejection) of innovations within a social system (Rogers, 1995; Trudgill, 1994).

In the present study sociolinguistic research was used to investigate the conceptual transmutation between sociolects regarding the value of higher education that may exist between members of officer and senior enlisted personnel in the U.S. Army. If indeed conflict exists regarding the merits of higher education between officer and senior enlisted personnel, it may be linked to sociolect nuances related to lexical-semantics used to communicate fundamentally similar processes. This phenomenon has been reported in organizational communication and related inter-socilolect studies to be linked to metaphors (Ortony, 1979; Putman, Phillips, & Chapman, 1999). The plausibility of the metaphor as a prime lingusitic focus rests in large measure on both its wide use in communicating dissimilar concepts between sociolects and the potential of lexical

ambiguity inherent within the metaphor associated with semantic misinterpretation (Finegan, 1995). The impending potential of miscommunication associated with language usage is considered to have applicability to issues surrounding the coupling of concept transfer within the diffusion of innovation process, particularly that aspect of the diffusion process centered on innovation reinvention (Rogers, 1995).

Students interested in language assimilation in general, and particularly those investigating the re-invention of innovations, see the margin of ambiguity that accompanies most lingusitic stylistics (such as the metaphor) as playing a key role in intra-sociolect conceptual transmutation and ultimately adaptive assimilation of newly introduced innovations (Palmer, 1980; Rogers, 1995). Out of this process speech communities often generate self-referential clusters of judgmental heuristics that define the ideological framework from which they approach various social circumstances (Boganso, 2001; Bok, 1978; Bolton, 1982; Cruse, 1986; Fasold, 1990; Kuran, 1995; Miller & Fox, 2001; West, 1984; Stever, 1999). According to Luhmann (1995) and Lee (2000) and other communicative system theorists the adaptive imperative impels this process into an evolving dynamic that is directly linked to language usage and ultimately language interpretation. In a broader context, language works to create and sustain what Giddens (1987) refers to as social structuration, and for Bourdieu (1994) the notion of society itself.

Operating from the perspective that language has a ubiquitous, symbiotic relationship with human social structure, most sociolinguists do not bifurcate the study of language and society, and instead considered these often segmented concepts to be cotangent refractive processes, with both shaping the other (Bolinger, 1986; Gannaway,

1995; Gardner, 1983; Holliday, 1979; Lee, 2000; Lepschy, 1982; Luhmann, 1995; Robins, 1980; Macy, 1991). Where sociolologists focus on general communicative-systems analyses, socolinguists tend to hone-in on the mechanics of language and its role within a particular social context (Finegan, 1995).

Of particular interest to the present study are the linguistics mechanics that allow individual sociolects to modify their unique, self-referential, adaptive imperatives while remaining copasetic with the needs of both other co-dependent sociolects and of the overall speech community (O'Grady, Dobrovolsky, & Aronoff, 1993). Recent discussions have highlighted several social system elements that simultaneously assist and yet confound the study of inter-sociolects communicative processes (Macionis, 1999; Malmkjaer, 2001). These and other ongoing discussions suggest that culturally disparate social circumstances (such as differences in levels of formal education) tend to generate disparate sociolects. Within such sociolects, students of language contend that attitudinal differences are generally reflected in the lexical sets that couple meaning within and between differing sociolect enclaves. These lexical sets, however, have inherent levels of semantic ambiguity that allow margins of contextual interpretation. This latter dynamic is largely balanced with the speech conventions of reiteration and redundancy (Allen, 1986; Croft, 1990; Cruse, 1986; Ellis, & Beattie, 1986; Finegan, 1995). But these same processes do not always operate to clarify communication, and can just as likely confound communication at every level; one of many examples of this is the application of preference falsification discussed by Kuran (1995). Preference falsification, however, is only one of a myriad of ways lexical ambiguity intercedes to impede or facilitate human interaction (Malmkjaer, 2001).

When X Means Y (But Not Always)

One linguistic stylistic that is often used to convey information within a complex social system is the metaphor. Among the many applications of the metaphor is their use as a platform for expressing attitudinal directionality and intensity within the communication process. As a lingusitic stylistic the metaphor allows the sender and receiver to exchange meaning by relating conceptual venues that only marginally overlap. In the metaphor, "X" means "Y" and within this ambiguous conflux both sender and receiver are able to develop a conceptual connection of the relationship from their assumed, mutual (implicit) understanding of "X" and "Y" (Atkinson, & Heritage, 1984; Prince, 1988; Oton, 1979; Gibson, 2000; Lakoff & Johnson, 1980). Key to the present research is the complex richness underscoring the communicative properties of the metaphor that allow it to convey attitudinal directionality and intensity.

As a communicative platform the metaphor tends to emerge within culture-bound, pre-set formats. Compounding the complexity of the metaphor as a communicative platform, meaning (intended or deduced), is considered by most linguists as impacted by inter-personal reciprocity and intra-personally refractive interpretation (Lee, 2000; Luhmann, 1995; Milroy, 1978; O'Grady, Dobrovolsky, & Aronoff, 1993). In daily usage the metaphor provides the means to convey a vast array of human emotions and complex ideation. Among the more common examples is how the metaphor is used to express socially acceptable notions of an upward, positive connotation such as "joy." One example might be, "My spirits are lifted today." An example indicating a less positive disposition may be, "My spirits are fading today." Less common examples might include how many laypersons and specialists attempting to convey aspects of Einstein's ideas

regarding quantum theory and a curved universe by using as an example, "...starlight passing near the sun is <u>bent</u> by the sun's gravity" (Cohen, 1986, p. 405). Einstein felt that even if he had not ever existed, the ideas that comprise his theories of relativity would likely have emerged (Cohen, 1986). To convey to the pubic his notion of ideational synergism and the emergence of his vision of quantum theory, Infeld (1950) reported that Einstein used the metaphor, "the times were <u>ripe</u> for it" (p. 46).

Most students of linguistics concur that metaphor usage spans a spectrum limited only by the speech conventions and the imagination of those that create them. One function of metaphor usage that is of central interest to the present research is how this particular linguistic stylistic provides a vehicle for conceptual communion between divergent sociolects. The underlying linguistic processes that support metaphor usage are both complex and vary widely in the context in which they are created and applied, nevertheless a brief overview highlighting a few of these elements deserves consideration. Finegan (1995) provides a concise overview of how most linguistics categorize the primary elements associated with the metaphor and its link to the study of semantics and the communicative process overall.

For Finegan and other sociolinguists metaphors are largely bound by, and are products of, cultural conventions. Considered universal in human language, metaphorical constructs are applied as a primary vehicle for human communication. Metaphors are also widely recognized for generating miscommunication. The crux of the latter circumstance centers on linguistic semantics in general and the study of meaning associated with language, but more specific to the present research, lexical semantics (Crystal, 1991; Malmkjar, 2001). Finegan (1995) writes:

> Of the various parts of grammar that people may refer to, 'semantics' is a more familiar term than phonology, morphology, or syntax.... Linguistic semantics is the study of the systematic ways in which languages structure meaning, especially in words and sentences (p.156).

Finegan (1995) further clarifies semantics to specify its various applications:

> Semantics is the branch of linguistics that examines word contrast and sentence meaning while generally ignoring context; pragmatics, in contrast, pays less attention to the relationship of word meaning to sentence meaning and more attention to the relationship of an utterance to its contexts (p.163).

The introduction of pragmatics into the clarification of semantics in the present study works to underscore the notion that any given lexical compendium exchanged between sociolects is less apt to be semantically isomorphic than not. One of several ways used to explain how words change meaning centers around the idea that shifts in lexical set meaning is derived in large measure by differing experiences associated with terms and phrases, experiences that vary from one sociolect to another (O'Grady, Dobrovolsky, & Aronoff, 1993). But narrowing the potential miscommunication inherent in metaphors requires first a keen awareness of the lexical set (and registers within these sets) as well as an awareness of the undercurrent of semantic ambiguity and vagueness that shrouds every aspect of human communication; and some argue, this circumstance is particularly prevalent in the metaphor (Mallmkjar, 2001).

Defined, ambiguity applies when a word or phrase can have more than one meaning, whereas vagueness indicates that certain details have been omitted. To clarify, Finegan (1995) writes:

> A sentence may be meaningful and true because it states a fact about the world or because the speaker is telling the truth. Two sentences may be related to each other because they mean exactly the same thing or because one implies the other. Finally, when we feel that there is something wrong with the meaning of a sentence, it may be because the sentence is contradictory, anomalous, or merely vague (p. 158).

The present study highlights ambiguity over vagueness, for vagueness is considered by most sociolinguistics as being less of a hindrance to communication since it can be greatly diminished by reiteration and elaboration (Crystal, 1991). Ambiguity on the other hand, has a more subtle (and some argue insidious) impact on human communication because it allows for a wide margin of assumed lexical consensus between individual communicators and particularly between sociolects (Crystal, 1991; Malmkjar, 2001) Centering on the role of ambiguity in metaphor usage, Finegan (1994) provides three categories of meaning to clarify how meaning operates within culture conventions. These include referential, social, and affective meaning.

> Referential meaning is the object, notion, or state of affairs described by a word or sentence. Social meaning is the level of meaning that we rely on when we identify certain social characteristics of speakers and situations from the character of the language used. Affective meaning is the emotional connotation that is attached to words and utterances (p.158).

In lexical semantics a key element is the lexical field analysis, how words and meaning are interrelated. Examples of lexical fields include hyponymy, which is a term whose referent is associated with subset referents; color, for example, has hyponymy subsets of different shades and hues (i.e., blue and green as well as blue-green). Such examples vary widely between speech communities, and sociolects within speech communities. One of the universals noted by sociolinguists is that in most cultures words are marked, that is, they are the words (or phrases) out of which subset words and phrases emerge. The example of "blue" or "green" above would be considered by most sociolinguists as being "marked" in many English speaking cultures given they are likely learned (and used) before the term "blue-green"—a combination of the two "marked" words. Part/whole relationships are another example of how lexical sets bind with

meaning; examples such as "room" and "house" and "arm" and "hand," or "minute,"
"hour," and "day" also fit this model. Within this lexical set the mention of any of a
part/whole sequence cannot be set forth without an implied reference to the fact that it is
associated within a part/whole series (Brown, & Fraser, 1979; Goodwin, 1981).

An important extension of the lexical field phenomenon to the present study
associated with lexical ambiguity is synonymy, where words and phrase are taken to have
paired meaning. According to Finegan (1995, p. 167) the "...terms movie, film, flick, and
motion picture all refer to the same set of referents....they are taken to be synonymous."
According to most students of sociolinguistics, the realm where lexical fields most often
contribute to miscommunication is what sociolinguistics called lexical register shifts. In
the parlance of sociology these lexical shifts are commonly linked to socio-economic
factors.

Although speech communities have a lingua franca that allows overlapping
communicative functioning within a broad band of sub-cultural settings, there also exists
the presence of lexical fields within sociolects and even subsets of sociolects. The hard-R
of Cape Cod's so-called upper socio-economic elite, for example, is distinct from the
"R's" of West Boston. And being "pissed" instead of "intoxicated" in London are lexical
register shifts indicative of both regional and socio-economic and thus sociolect
differences. It is within this linguistic nether world where lexical ambiguity is most
frequently applied in the study of daily interpersonal communication (Crystal, 1991;
Malmkjar, 2001). Over the years, however, this specific niche of metaphor usage in
sociolinguistic inquiry has received only cursory exploration as to how it affects the
diffusion of innovation process (Rogers, 1995). One explanation for this general dearth of

research is the growing recognition of language diversity in context at every level. Where once regional and socio-economic factors were centers of language use and variation inquiry, a growing body of research is emerging that examines context and topic considerations as well (Malmkjar, 2001).

Intersecting the study of language are various fundamental precepts that surround word usage and meaning. Regarding the present study, two of many examples are polysemy and homonymy. Polysemy is defined by Finegan (1995, p. 171) as a word that has more than one meaning. Finegan writes the, " word plain, for example, can have several meanings: (1) 'easy, clear'; (2) 'undecorated'; (3)'not good-looking'; and (4) 'a level area of land...." Finegan (1995, p.171) defines homonymic as "[t]wo or more words" that "sound the same but have different meaning. I, eye, and aye are homonymic: they have different meanings but are pronounced alike." The linguistic distinctions between polysemy and homonymy become problematic when they are used to form metaphors that extend (or imply to extend) the use of a lexical item beyond its primary meaning to define referents that are similar to, but not synonymous. The margin of ambiguity tolerated within a given social circumstance can lead to the remarkable human ability to "communicate," but just as equally likely is the human capacity to miscommunicate and not fully grasp the extent to which the margin of semantic transfer has been breached (Malmkjar, 2001).

Diffusion of Metaphors & The Military Setting

The universality of metaphors in human language underscores nearly every aspect of human communication, and in the present study is being explored as a vehicle impacting the innovation acceptance or rejection process (Rogers, 1995; Blumer, 1969;

Boden, 1988; Lee, 2000; Orton, 1979; Wierzbicka, 1985; Wolfram, 1991). In the context of the military setting, two distinct, but loosely coupled, cultures exist between the officer and enlisted cadre. Although these cultures often operate in tandem to accomplish focused objectives, they are separated at several levels.

Central to the present study are the linguistic factors, particularly the existence of separate sociolects that often work to impede communication between the officer and senior enlisted cadre. The first centers on a relatively rigid code barring extensive interpersonal interaction between officer and enlisted personnel. This system tends to create and maintain distinct sociolects and, equally important, specialized lexical sets that differ between these two levels of command within the military. The second draws from the first to the extent that levels of command are not encouraged to clarify meaning from senior ranking personnel (Maskos, 2001). Further compounding this circumstance is that one of the key mechanisms that allows the use of metaphors to operate as an effective communication stylistic is reiteration to obtain clarification (Mallmkjar, (2001). Within the military setting, for a lower ranking cadre to ask for clarification (reiteration) is traditionally not acceptable within the parameters of long-established communicative conventions.

Many social observers (McKenna & Feingold, 2003; Putman, Phillips, & Chapman, 1999; Snider, Priest, & Lewis, 2001; Stever, 1999) indirectly broach a question that is central to the present study: How do disparate cultures within an organization communicate effectively? In the present research that general question is posed regarding the long-standing educational (cultural) gap that exists between the officer and senior enlisted ranks of the U.S. Army. Further, if indeed such a conceptual

gap exists between the officer and senior enlisted cadre, to what extent (if any) would such a circumstance work to negatively shape the discretionary power used by senior enlisted cadre charged with acting as designated change agents for the infusion of higher education in the U.S. military?

The present research was dedicated to investigating the role of the metaphor in the diffusion of innovation process as it pertains to the infusion of higher education programs into the U. S. Army. As a commonly used communication stylistic, the metaphor was the focus of the present research for several reasons. First, as a communication vehicle the metaphor is widely used to convey concepts that have marginal parameters of semantic overlap between sociolects. Secondly, the metaphor operates within margins of conventionally agreed upon levels of ambiguity relative to both concepts they convey, as well as the lexical items used to convey these concepts. These parameters of communicative conventions are often intra-sociolect specific, and are not necessarily inter-sociolect transferable. Lastly, all of these factors converge in the social milieu of the military setting where there exists (a) a traditionally wide communicative margin between officer and senior enlisted sociolects; and (b) the concept of higher education as a medium for developing more proficient critical thinking skills is likely better understood by officers who have direct experience with college and/or university-level education, than by senior enlisted personnel who likely have little or no direct experience with college- and/or university-level education. In spite of these differences there likely exist various metaphors that provide common communicative ground between officer and senior enlisted sociolects.

The answers to such questions are thought to have immediate importance for the military's ability to effectively conduct its programs in an information-rich, technology-driven battlefield environment (Ebbesen, 1996; Kerr, 1995; Kegley, & Raymond, 2002; Trow, 1989). The extent, to which there exists the possibility of any communication impasse regarding the infusion of higher education within the U. S. military in general, and the U.S. Army specifically, is considered to be of utmost importance for America's ongoing national defense program. Yet, in spite of the importance, to date no research has been conducted to shed light on this situation.

Advocates of higher education for enlisted personnel within the military recognize that resistance to the notion of higher education may be more intense within some subcultures such as the U. S. Army with its long-standing practice of providing minimal decision-making than within other military subcultures (Rown & Schere, 2001; Vine, 1989). It is speculated that the nexus of this interpersonal communication impasse may be linked to near-peer cultural nuances (Rogers, 1995). Taking this idea into the organizational setting, it is argued that lexical-semantic differences exist connected to the use of metaphors as a concept-conveying platform between sociolects (Ortony, 1979; Putman, Phillips, & Chapman, 1999). It is furthered argued that much of the communication research conducted within civilian organizations can be extended to circumstances within the military setting where officer and senior enlisted cadre co-exist, each within their respective sociolects. It is further argued that levels of ambiguity operating within parameters of social convention may contribute to miscommunication (or allow willful misinterpretation) between officer and senior enlisted sociolects.

To summarize the present section, the intended and unintended consequences of human communication have formed a major area of study within the genre of diffusion of innovation research (Rogers, 1995). One of many examples of how human communication is just as likely to convey misinformation as not, is derived from research on organizational communication. Within this body of research Putman, Phillips, and Chapman (1999) and others (Owens, 2000) see Weberian-type bureaucracy as being rife with communicative impasse opportunities. Within this supposedly structured setting exists opportunities for the application of discretionary power—the result can make the difference between change agent preference falsification or mandated support (Rogers, 1995). In spite of the mounting evidence linking language usage and concept transmission in the diffusion of innovation process, few sociolinguistic studies have been conducted to cull out the specific linguistic vehicles central to this process (Finegan, 1994; Marshall & Rossman, 1999; Milroy, 1980; 1987; Rogers, 1995).

The positive reversal of attitude toward change within the military establishment, however, has been focused primarily on technology: specifically combat-related hardware. Adjoining any hardware innovation, however, is a software or educational element (Mais, 1999; Roger, 1995). One example of this is the extent to which the education required to effectively make operational the infusion of warfare technology at every level of the military command has met with some resistance within the military establishment (DoD ACES Program, 2002;Volker, 1999). In spite of the growing awareness of education as a positive component within the overall the military mission, some observers suggest that there may exist pockets of resistance within the military

establishment that may impede the infusion of recent educational mandates (Franke, 2001).

The infusion of the ACES program has likely confronted several impediments centered on what may seem as all-too common daily speech patterns. A central supposition of the present study is to answer the question of to what extent there exists a communication consensus between the officer and senior enlisted personnel regarding the role of higher education within the overall Army mission?

Some observers consider the utility of "higher education" to the overall mission of the U. S. Army command to be of crucial importance to not only the well-being of America's armed forces, but to the nation as a whole (Rown & Schere, 2001; Sheldon, 2000). Some observers suggest that the consequences of highlighting higher education infusion into all levels of its officer and enlisted cadre will serve to create a more academically upgraded fighting force with enhanced critical thinking and decision-making skills. The implications of a more "educated" military force, however, is argued to provide a more functional (combat effective) military force, and will likely alter the functional operations of the future military's command and control structure (Ebberson, 1996; Efflandtd & Reed, 2001). Indicators of this change include how the U. S. Army approaches its collection and dissemination of information, and another is how the Army command approaches the notion of leadership and followership (Masi, 2000).

Revisiting Communication Theory & The Military Setting: Information & Power

For the first time in human history technology is available to provide real-time information-processing capabilities to and from the outer-most periphery of human societies (Bernstein, & Eaton, 1994; Boortsin, 1986; DoD ACES Program, 2002;

Laurillard, 1997). This capability highlights individuated information gathering and assessment from a societal inverted pyramidal perspective (Kahne, 1996). This perspective supports the merits of providing opportunities for the shaping of decision-outcomes and assumes a capacity for critical thinking ability within all sectors of society (Barkow, Cosmides, & Tooby, 1992; Buenker, & Ratner, 1992; Burdin, 1994, Burdin, & Hoyle, 1994; Justiz, Wilson, & Bjork, 1994, Tishman, Perkins, & Jay, 1995).

Out of this circumstance arises the question of how to convey the value of higher education as an ongoing functional component within the present and future Army to the immediate and long-range advancement of the organization's overall mission on and off the battlefield. Some communication researchers contend that humans are never fully convinced they have all of the information required to obtain "absolute" decision-making closure (Festinger, 1957). The notion of continuous, "second-guessing" and opting for least unacceptable alternatives, and compromise, is considered systemic to human communication (Kuran, 1995). For Etzioni (1961,1999) others such as Elshtain (1995) who support the Communitarian thesis, this predisposition is a focal point around which consensual clusters of public interest converge into broader, society-wide judgmental heuristics upon which value constructs are often predicated.

Foundational to this position is the work of Pareto (1921) and Strauss (1978) who see information as a primary medium of exchange, a barter commodity driven by the adaptive imperative to gain control over social circumstance. According to Pareto and Strauss (and others), individual and group compromise takes various forms that often underscore what Habermass (1995) and Coleman (1995) characterize as rational communicative behavior. In contrast, Bok (1978), for example, cites the prevalence of

lying (flagrant falsehoods) and Kuran (1995) discusses the wide spread communicative tack of preference falsification ("Telling people what you think they want to hear"). Most observers contend these negatives are conducted in the name of maintaining the social equilibrium imperative (Fowler, Hodge, Rress, & Tress, 1979; Frazmand, 1999). Giddens (1984) underscores this social equilibrium-maintenance imperative and suggests that the constitution of society is structuration, and that the prime directive of any congress of individuals is to secure an epicenter around which social stability can be maintained.

Within such a flexible, compromise-intensive, communicative environment, individual, and ultimately societal, information processing is in a state of continual, context-centered reconfiguration (Brown & Fraser, 1983; Fishman, 1972; Popkin, 1999; Wittgenstein, 1922; 1969). It is suggested that this information-processing mechanism drives decision-making toward increased option narrowing and the development of judgmental heuristics that provide constructive currency for real-time social survival (Dahrendorf, 1973; Gibson, 2000; Kuran, 1995). It is further suggested that this symbiotic relationship between intra- and inter-personal information exchanges is systemic to human communication (Lee, 2000; Luhmann, 1995).

Taken as a whole, the perspectives discussed above portray information-based power as being multidirectional in the collection stage and unidirectional in the dissemination stage and privileges the latter as being of a shorter duration than the former (Atwater, 1999; Bacharach, & Lawler, 1981; Bardach, 1995; Finnegan, 1996; Rogers, 1995). It is on the relatively short information dissemination stage, however, that proponents of unidirectional leadership tend to focus by stressing outcome and thus eclipse the broader information assessment process (Fullan, 2000; Northouse, 1999).

From the unidirectional leadership perspective, human communication is seen as a social activity where individuated leadership emerges only as a final stage in a process, a stage that provides closure to context-bound information convergence (Goodwin, 1981; Grice, 1975; Gumperz, 1982). This perspective works to dismiss the primacy of direct top-down information dissemination as illusionary, and instead favors stages of near-peer information exchange (Dougherty, 1999; Hardy & Clegg, 1999; Rogers, 1995). The near-peer information dissemination thesis is supported by observers that see decision-making power as a constant osculating process drawing from multi-directional sources (Atkinson, & Heritage, 1984). One key dynamic of this circumstance is what Beck (1986) characterizes as vigilance over the maintenance of a fluid, real-time, risk-consciousness regarding the state of social equilibrium.

These ideas fuel debates between proponents of Normative Elite Theory (Frazmand, 1999) and those who advocate the expansion of the public sphere as an adaptive survival feature of civil society (Fraser, 1995). At the core of these debates is the notion of centrifugal versus centripetal information gathering and dissemination, ideas that underlie much of the organizational theory controversy over "span of control" issues (Meier & Bohte, 2000; Rainey, 2001).

New Visions of Command & Control

Futurists see the 21st century and beyond as an environment flush with information, but also potentially mired by hyperpluralism (Dryer, 2000). Within such a social milieu loosely-coupled interested groups (Weick, 1999) form and disengage at a highly rapid rate spurred by technology that allows a near instantaneous decision-making feedback capacity over the broadest possible populations and nested subgroups (Fowler,

Hodge, Kress, & Trew, 1979). Those who suggest that such a state of information flux would lead to increased "groupthink" (Janis, 1973; Gibson, Ivancevich, & Donnelly, 2000) are countered by those who believe that the adaptive imperative is driven by structure-driven, equilibrium-inducing forces (Burt, 1986; Giddens, 1984), and who are also attuned to anomalies that optimize survival potential not considered in the immediate present (Cohen, 1986; Kuhn, 1971).

The opposing forces of those seeking equilibrium in the present and those determined to maintain vigilance for more productive futures are highly dependent on both intra- and societal panoptiocons (Foucault, 1984; Lee, 2000). Although this vision of the future contradicts the Jacksonian trustee form of governance, it adds merit to Jefferson's ideas regarding the democratization of education and expanding the sphere of informed social discourse (Ball & Dagger, 1991; Dyer, 2000; Dunn, 2002; Eisnor, 1995; Smyth, 1989). A core tenant of Jefferson's vision of a citizenry imbued with a broader educational perspective is the Enlightenment-spawned belief in the viability of minority interest viewpoints (Patterson, 2000). Where detractors of Jefferson's thesis call attention to the ominous potential of hyperpluralist gridlock over contested public policy agenda (Dyer, 2000; Vine, 1981; Kimmerl, & Stephen, 1998), advocates of Jefferson's position point out that informed—and truly public—debate is fundamental to human interaction that supports Strauss' (1978) concept of negotiated order.

Strauss contends that an information exchange environment is systemic to human society. Most sociolinguists support this thesis and add that although communicative levels of human interaction tend to expand in geometric fashion in proportion to the number of communicators, this potentially chaotic circumstance is sustained by highly

debated embedded communicative-ordering mechanisms derived out of primary

(Chomsky, 1968) and secondary (Halliday, 1978) socialization processes. This debate

runs deep and wide within every dimension of the study of human language (Duranti,

Goodwin, 1992; Ellis & Beattie, 1986; Edwards, 1985; Finegan, 1995; Lehmann, 1992;

O'Grady, Dobrovolsky, & Aronoff, 1993).

From an educational administration and general organizational theory standpoint,

this vision supports Mary Follett-Parker's (1933) notion that leader-follower models may

just as aptly be couched in terms of follower-leader (Owens, 2002; O'Grady,

Dobrovolsky, & Aronoff, 1993). At the broader societal level, Follett's vision supports

Jefferson's views of democratized education and could be taken as supportive of an

educational curriculum agenda that sustains our national goals at a larger societal scale

(Lewis & Maruna, 1996). In 1986 Smyth, followed by Slattery in 1995 and Kahne in

1996, argued that in an information rich society, open information exchange is not only

essential to the intellectual growth of individuals, but ultimately to the world as a whole.

Cosner (1956) further supports Jefferson's thesis by suggesting that although

information exchange within a diverse social environment often encourages forms of

social conflict, such conflict is nothing more than ritualized information sharing that

highlights debate as an end in itself (Cosner, 1986; Hayek, 1999). Lee (2000) and others

see conflict-generated communication as systemic to the social adaptive process. Elshtain

(1995) and Fraser (1995) add to this by contending that the inclusion of minority views

encourages the maintenance of social order. Each of these conflict-intensive perspectives

supports the Jeffersonian position that decision-making based on informed participants

who value deliberation that includes the out-most edges of society, works to encourage

social stability by providing a sense of personal and group efficacy to otherwise minority perspectives. For Lee (2000) this communicative-based vision sees humans continually engaging and disengaging in an atmosphere where ideational consensus is always marginal—humans never truly form a collective, but rather reside in individual levels of embedded consciousness.

For some observers, the epicenter of this position is the survival adaptive imperative that underscores the human ability to compromise, an ability that is ingrained in social communicative rituals. For the proponents of this position, rituals are a binding force for conflicting parties and compel them to consider the rationality of otherwise disjointed points of view and the validity of another's communicative intent (Habermas, 1995; Sacks, Schegloff, & Jefferson, 1974; Strauss, 1978). Lee (2000) summarizes this perspective and adds that individual social actors are unique, information-gathering beings. In a world they can never fully understand or comprehend, these actors seek (partial) closure and use individuated "leadership" as an information-synthesizing conduit that tends to reduce, but not abate, for continuing information transmutation. Beck (1986) supports Jefferson's vision, contending that an informed populace tends to have lower levels of generalized social anxiety, a state that results from the perception that they are participating as individuals in risk reduction deliberations concerning possible negative outcomes associated with social policy that have both group-specific and societal-wide impact. These viewpoints highlight the merits of social communication rituals as a mainstay of social order, where leadership is not centralized power wielding as much as it is a conduit for information exchange (Bacharach, & Lawler, 1981; Berger, & Luckmann, 1967; Elshtain, 1995).

Some historians of educational public policy see the thesis of this postmodern, flexile communicative social environment as foundational to Jefferson's efforts to democratize higher education to the broadest segments of American society (Collier, 1995; Justiz, 1994; Justiz, Wilson, & Bjork, 1994; Stambler, 1998). As discussed earlier, some observers suggest that an interactive distal-proximal decision-making model germinates communicative synergism, that one plus one can indeed equal three (Rutgers, 2001). The concept of synergism in decision-making all but dissolves polarization within the decision-making setting, and instead sees information exchange as a summative process that, by its very nature, includes elements of all possible contingencies (Barkow, Cosmides, & Toby, 1992; Duranati, Goodwin, 1992; Kellner, 2002). This tack is often characterized as informational parts melding into a sum of the whole, and where the whole is ultimately greater than the sum of its parts (Beck 1986; Kahne, 1996, Popkin, 1999; Northouse, 2001).

Several questions emerge out of the previous discussion. First, what role does control play within the leader-follower decision-making process and second, where is its epicenter when information is acted upon? Third, to what extent is the selection of probable contingency strategy privileged over outcome consequence? And finally, couched in terms of educational policy, to what extent does post-secondary education provide the ability to construct judgmental heuristics that can sustain the survival requirements facing a society undergoing continuous transformation within an information-rich environment such as that being experienced by America's armed forces?

The present study will use discursive analysis to investigate how metaphors are used and interpreted to convey, or impede, the infusion regarding the potential value of

higher education for the lower ranking enlisted personnel relative to the U.S. Army's overall mission. To accomplish this objective this research will explore the margins of ambiguity that may, or may not, exist for lexical items used within metaphors by communicators, in this case officers, and conversely, senior enlisted sociolects (Fowler, Hodge, Kress, & Trew, 1979).

Summary

For many who study the communicative dimensions of society, and particularly those that focus on sociolinguistics, the term human communication is considered to be somewhat of an oxymoron. It is not that students of social interaction contest the presence of the communicative process, but that they are truly bewildered at the perplexing dynamics that underlay this enigmatic, and remarkable, human attribute. Taken one step further, students of communication are simply impressed that humans can communicate at all, or at least as effectively as they have demonstrated over the last several millenniums. This chapter outlined several aspects of one of the linguistic processes with special attention given to what is considered basic to the human communication forum, the metaphor. Among the aspects of the metaphor that make it an intriguing linguistic medium is both its wide use in communicating dissimilar concepts between sociolects, and the diverse margin of sociolinguistic-specific lexical sets that can operate within the metaphor, which in turn create an ever-present potential for semantic ambiguity, and a breakdown in the human communication process.

The basis of the conflicting sociolects' argument accepts the position that individuals and clusters of individuals are, psycho- and sociologically individuated; they are embedded into society, and synergistically compose what is considered as the social

milieu. It is further posited that communication platforms (such as metaphors) and levels of information specific to the topic of interaction (familiarity with higher education in this case) have a symbiotic and systemic relationship to the transfer of ideas within human society. Regarding offsetting potential miscommunication is the presence of socially bound communication conventions and lexical set overlap. The former is considered to have primacy. Social speech conventions such as redundancy and reiteration tend to expand the potential for information transfer by narrowing margins of ambiguity. The process of repeating a term or phrase works thus helps to clarify meaning. A social setting that restricts lexical elaboration of specific lexical set items may potentially increase the possibility of inter-sociolect miscommunication.

Several settings within which the metaphor functions in human interaction are reviewed in this chapter. One is how the metaphor fits within the schema of overall social systems. A second is how metaphors work as binding agents to congeal differing sociolects within larger speech community spheres. This extends into how semantic ambiguity functions as a cohesive agent to link lexical sets both within and between culturally disparate sociolects to both maintain and sustain a mutually beneficial adaptive imperative.

The contextual theme used to focus on the communicative dynamics of the metaphor is considered to have a clear theoretical linkage to both social interactions in general, but more specially to the diffusion of innovations between sociolects that are considered to have ideologically differing worldviews. The subject matter is education, in particular the merits of the democratization of higher education in the U.S. Army. This setting provides an explicit example of how metaphors may operate in what has

traditionally been characterized as divergent subcultures. The communicative topic is the infusion of the recently mandated ACES program in the U.S. Army, and how this program communicated between officer and senior enlisted cadre regarding their respective vision of how higher education fits into the overall military mission. On a broader scale the creative evolution of language and contextual linguistic stylistics such as are evident in metaphors serve to merge inter-sociolect's interaction, and the development of hybrid sociolects composed of the joining of two or more.

This chapter argues in support of Thomas Jefferson's position that the rigors associated with attaining a college- and university-level education provide a better foundation for developing critical thinking skills needed for a more productive society, including all levels of the U.S. military organizational structure. This position contradicts Andrew Jackson's contention that a high school level education is a sufficient educational standard for America in general, and by implication the military establishment. Concerning the latter, arguments were set forth to support the position that the connection between higher education and critical thinking skills have a valid standing, and can be generalized to support educational programs within the military such as ACES. One of several examples delineated was the continuing upsurge of high tech weaponry and associated communication skills demanded of present day frontline soldiers on the modern battlefield. This circumstance was argued to require the delegation of more direct, onsite decision-making responsibility to the lower ranking cadre who operates at the outer-most periphery of the command and control spectrum on the battlefield. These demands are conceded to be like no other expected of lower ranking soldiers in military history and will place a greater emphasis on their individual capacity to engage in critical

thinking and decision-making skills. Lastly, elements of the diffusion of innovations model such as the change agent impact on near-peer communication and innovation reinvention were also explored in the present chapter.

The rationale for investigating the officer and senior enlisted sociolects is supported by the supposition that a long-standing rift between these two military command cultures may exist. Evidence points to the overwhelming number of marginalized, and often educationally challenged, sectors of America's population that compose the enlisted ranks of the U.S. Army. This same body of evidence points out that members of the officer cadre are generally drawn from those sectors of American society who have attended an institution of higher education.

It is argued that the differing educational experience that historically exists between officer and enlisted cadre may contribute to a communication impasse between officer and senior enlisted command cultures and may work to impede the infusion of higher education into the military enlisted ranks. The potential of this communication conflict is considered tied to lexical semantics in the construction and application of metaphors used by these differing sociolects. This rationale connects the diffusion of the innovation process operating within the U.S. Army regarding the ACES programs, and uses the metaphor as a linguistic platform to explore possible communication outcomes between officer and senior enlisted cadre. In sum, the present chapter set forth the rationale for investigating the metaphor as medium for conveying perceptions regarding the role of higher education in facilitating critical thinking skills in the military environment from the perspective of the diffusion of innovation model.

CHAPTER III

METHODOLOGY

Introduction

Today a college-level education is widely considered to be the measure of a minimum education (McNeil, 1996). This shift from high school to college- and university-level education has transformed America's commercial and political agenda and its relationship with the worldwide academic community (Kerr, 1995; Miller & Fox, 2001). At the epicenter of this transformation is the long-standing ethos supporting more in-depth liberal arts, science, and mathematics curricula, but most importantly, a focus on the critical thinking skills that have long been associated with higher education (Capper, 1993; Tishman, Perkins, & Jay 1995).

Over the last forty years the emphasis on college level education over high school has reached nearly every sector of American life (Fowler, 2000; Fullan, 2002; Newman, 1994). Within the last ten years this trend has found its way into America's military establishment (Efflandt & Reed, 2001; DoD ACES Program, 2002). This is due in large measure to the need to create and maintain a military force capable of successfully performing on the technology-driven battlefields of the 21st century and beyond (Driscoll, 2000). Given this mandate, the U.S. Army is challenged to unify the awareness for the need of supporting educational programs such as the Army Continuing Education System (ACES) throughout its culturally diverse, and complex organization. The U.S. Army and other military branches have increased their efforts to engage lower ranking enlisted

personnel into the arena of higher education. This is unprecedented in the history of the world's military establishments (Carnevale, 2003; Coppa & Gericke, 2000; Ebbesen, 1996).

It was asserted that there may exist a semantic gap between officers and senior enlisted personnel regarding the role of higher education in the overall U. S. Army. As a result, the U.S. Army mission to infuse the merits of higher education into the lower enlisted ranks may take longer than anticipated by military command. It was argued that the presence of differing sociolects may be a key impediment in the implementation of Army educational programs.

Discourse Analysis: Uncovering Metaphor Usage

The present research was dedicated to uncovering sociolinguistic coupling mechanisms, specifically the use of metaphor, within the officer and senior enlisted sociolects of the U.S. Army. The present study used qualitative sociolinguistic research (discursive analysis) methods (Glesne, 1998;Gumperz, 1982;Ortony, 1979) and investigated how metaphors are used and interpreted to convey the value of higher education for the lower ranking enlisted personnel relative to the Army's overall mission (Fowler, Hodge, Kress, & Trew, 1979). This research tack extended previous organizational communication research that explored the role of the metaphor as a positive and/or negative communication modality in the organizational information exchange process and concentrated on the organizational diffusion of innovation process (Putman, Phillips, & Chapman, 1999; Rogers, 1995).

Research Questions

This study investigated the following overarching question: Within a U. S. Army unit, what are the possible linguistic transmutations that may occur between officers and senior enlisted personnel during the idea-transmission process. Specifically, what possible semantic misinterpretations may surround various metaphors used between officer and senior enlisted cadre during the infusion process associated with conveying the value for lower-enlisted personnel to pursue the opportunity to engage in the Army's ACES professional development program? This study addressed the following sub-questions:

1. What metaphors are used by the officer cadre to describe how higher education serves lower ranking enlisted personnel in their role in the overall Army mission relative to developing critical thinking skills within increasingly technologically sophisticated combat environment?

2. What metaphors are used by senior enlisted cadre to describe how higher education serves lower ranking enlisted personnel in their role in the overall Army mission relative to developing critical thinking skills within increasingly technologically sophisticated combat environment?

3. What, if any, lexical argots exist within officer and senior enlisted sociolects that may create semantic misinterpretation of metaphors applied to the ACES program and its role within the U.S. Army? That is, how do officers and senior enlisted personnel interpret each other's metaphors?

Research Design

To accomplish the research objectives a two-tiered, qualitative descriptive sociolinguistic analysis was designed to uncover judgmental heuristics expressed in metaphors used by different sociolects within the U.S. Army command structure. This research combined both discursive phenomenological and ethnographic approaches (Corsen, 1995; Frankfort-Nachmias & Nachmias, 1996; Glesne, 1998; Marshall, & Rossman, 1999; Milroy, 1987; Putman, Phillips, & Chapman, 1999; Searle, 1971).

The data gathering procedure incorporated a two-tier discourse analysis (Brown & Yale, 1983; Coutlhard, 1985; Marshall & Rossman, 1999; Milroy, 1987; Prince, 1988). A content analysis of differences and similarities of metaphor conceptualization and argot used to express perceptions of higher education within officer and senior enlisted command structures was employed. This same approach was applied to investigating differences and similarities of metaphor conceptualization and argots used to express perceptions of higher education between officer and senior enlisted command structures (Anderson, 1985; Anderson & Keenan, 1985; Bolinger, 1986; Corson, 1995; Cruse, 1986; Lepschy, 1982; Matthew, 1973; 1991; Wierzbicka, 1985; Wolfram, 1991).

The second tier discourse analysis phase employed members of the officers and senior enlisted military cadre of Fort Gordon, Georgia. The interviewees were asked how they interpreted the argots and metaphors applied by the opposing groups' perceptions of higher education. The underlying purpose of the double tier discourse sample was to determine similarities and/or differences in how the officer and senior enlisted sociolects communicated their respective perceptions of higher education and its place in the overall military mission in general, and in the lower enlisted personnel specifically (Allen, 1986;

Biber, & Finegan, 1993; Collier, 1995; Leech, 1981, 1983; Lehere, 1974; Ortony, 1979;

Palmer, 1981; 1983; Slobin, 1979).

Instrumentation

The present study used phonetic (intonation) elongation tape recording and

transcription technology similar to that used in previous studies of this kind (Anderson &

Keen, 1985; Corson, 1995; Duranati & Goodwin, 1992; Gibbson, 2000; Glesne, 2000;

Gumertz, 1982; Hyman, 1975; Matthew, 1972; Marshall & Rossman, 1999, Prince, 1988;

Grace, 1975; Hayek, 1994; Malmkjaer & Anderson, 2001). The specific equipment used

in this study was the Sanyo Memo Scriber Model 8080. The application of this

technology provided a means to sort out the metaphors used by the sample population as

they conveyed the concept of higher education and its impacts on the military's agenda

from their point of view.

Over the last twenty years sociolinguistic researchers have sought to collect

sociolect-specific innuendo, such as sarcasm, that may be overlooked within lexicon- and

morphology-only research (Hyman, 1975; Matthew, 1972; Tomlin, 1986; Romaine,

1988; Wierzbicka, 1985; Tannen, 1990). The primary value of this audio taped dialogue

technology for the present research was that it provided the elongation of phoneme

separation and thus allowed for the discernment of word compactions during discourse

analysis. Previous sociolinguistic research of human interpersonal communication had

used this technology to report valuable insight into the ambiguous-intensive nuances of

human speech (Atkinson, & Heritage, 1984; Bolinger, 1986; Cohen, 1985; Geetz, 1994;

Kress, 1985; Martin, 1994; West, 1984).

Participants

The study was undertaken within a U.S. Army organization located at Fort Gordon, Georgia. A quota sample of eleven individuals from a military unit being activated for overseas deployment was interviewed. The sample contained five officers and six senior enlisted soldiers. The sample reflects an approximate ratio between officer and enlisted personnel in the unit that was investigated. The interviewees under went tape-recorded in-depth interviews. These interviews focused on culling out the metaphors used to convey the concept of higher education and its role in the military mission. Individual interviews were approximately one half-hour in duration and followed a pre-formatted query question schedule (Ferguson, & Heath, 1981). The sample was composed of three male and two female officers, and five male and one female enlisted personnel. Interviewees represented ages from 22 years to 57 years, an educational range that included high school, two and four years of college and graduate (master's) degree levels; ethnic composition for officer and enlisted respondents included both African-American, Latino-American as well as Caucasians.

Procedure

One-to-one interviews were conducted in the Commanding Officer's office; a small (four chair) circular conference table was used. Two tape recorders were placed in sight of the interviewees. Each interviewee was first briefed as to the purpose of the study. Each interviewee was read aloud the Consent Letter Form and asked to sign and date a copy. Each was given one copy of the Consent Letter Form and the researcher kept one copy. To assure that the interviewee was aware that he/she was being tape recorded, they were asked to turn the tape recording machines on (and off) themselves.

The interviewees were informed that they were being asked to talk about the ACES program and how they communicated their point of view to other members in the military, representing ranks above and below their own. Following the interview, the interviewees were asked not to discuss the topic or any aspect of the interview with other members of their unit until the completion of the interview process.

The second tier of interviewing was conducted with four interviewees representing both sociolects immediately following the first phase of the interview process. During the second phase of the interviewing process respondents were asked to discuss their interpretation of a select series of metaphors and terms of opposing sociolects.

Pre-Interview Questions

Following are the interview set-up questions designed to provide a context for interviewees. This context-establishing procedure was drawn from formal guidelines generally prescribed within the field of qualitative research (Glesne, 1998; Goffman, 1974; Marshall & Rossman, 1999). Open-ended questions allowed for the widest communicative latitude possible for each respondent (Goodwin, 1981; Grice, 1975; Gumperz, 1982; Martin, 1994; Milroy, 1987; Nagel, 1994; Sacks, Schegloff & Jefferson, 1974; Saville-Troike, 1989).

Tier One Interview Protocol

Officer respondents

Question One: In general terms, how would you describe the ACES program to senior enlisted personnel?

Question Two: What do you think would be the benefits of the ACES program for lower ranking personnel regarding their performance on the battlefield?

Senior Enlisted Cadre

Question One: In general terms, how would you describe the ACES program to an officer?

Question Two: What do you think would be the benefits of the ACES program for lower ranking personnel regarding their performance on the battlefield?

Tier Two Interview Protocol

Drawing from two officers (one male, one female) and two enlisted soldiers (one male and one female), respondents were asked how they interpreted a selection of metaphors and terms obtained from the first tier interviews (see Table 1). The metaphors and terms were drawn from both officer and senior enlisted interviewee populations. To ensure subject anonymity all metaphor transcriptions were numbered. None of the transcribed metaphors included references to either the subject's real name or specific military rank designation. At various times during the interview process fictitious names were used and references were made to indicate that the interviewee was either an officer or an enlisted soldier.

Post Interview Follow up

Respondents were informed that a summary of the research results would be forwarded to them in approximately eight weeks. All respondents were offered a copy of their audiotape and the written transcriptions. Two audiotape recordings were made. The Georgia Southern University Institutional Review Board form indicates that both audiotapes and transcriptions were to be destroyed upon completion of the data analysis phase of this research. Those respondents who did not wish to receive a copy of the audio tape and/or transcription were informed that the audio tapes were to be unraveled and

Table 1

Selection of First Tier Interview Metaphors and Terms

Metaphor or Term

Work your way through it (4th Enlisted)

Avenues of exploration (5th Officer)

Processed action (3rd Enlisted)

It's an open door (2nd Enlisted)

Broadens your horizons (3rd Enlisted)

A key to the future (4th Officer)

Put yourself on the same floor with the same person (3rd Officer)

Top of your game (1st Enlisted)

You're gonna be able ta keep yurself together (1st Officer)

---

machine-shredded with the transcriptions derived from their audio tape; this process was to be conducted in the presence of witnesses. The respondents were informed during the interview debriefing and in the IRB Consent Letter that there was no name, rank or other personal identification linked to either their audiotapes or transcriptions.

Treatment of the Data

The following discursive research used audiotape interviews transcribed into a written format. The interview transcriptions were delineated in sequential, question-answer format similar to that found in Balase and Balase (1995), and Lakoff and Johnson (1980). The research data contains material that could be considered security classified. As a result, no interview transcriptions are included in this text. Written permission to conduct this study was obtained with the understanding that all related research-gathering materials were to be (a) provided to the individual respondents and (b) all other copies would be destroyed in the presence of a witness. Verification of the destruction of this material will be forwarded to officials at Fort Gordon, Georgia.

Summary

The present research explored how differing command segments of an Army unit being deployed overseas from Fort Gordon, Georgia used metaphors and specific terms to express (from their sociolect) what constituted an appropriate level of formal education and the merits of such an education relative to their understanding of the overall military mission. This research also explored how the value of higher education in a combat environment is communicated by and between officers and senior enlisted personnel. Key to the present study was the exploration of possible differences in how officer and senior

enlisted personnel see higher education as a means of developing critical thinking skills

and useful judgmental heurists within all levels of rank in the U.S. Army.

CHAPTER IV

REPORT OF DATA AND DATA ANALYSIS

Overview

The present study was designed to uncover possible differences between

sociolects of officer and senior enlisted personnel in the U.S. Army. The linguistic

stylistic under study was the metaphor. The lexical sets used to construct these metaphors

were also explored. Several topics were used as media upon which metaphor and lexical

could be constructed. The primary topic was the merits of higher education to the overall

military mission. A second topic was how higher education may or may not impact lower

ranking enlisted soldiers in a combat environment. The ACES was used as the topic of

discussion for this qualitative, discursive study.

It was argued that the presence of differing sociolects might be a key impediment

to the implementation of Army educational programs. The empirical findings of the

present study, however, did not fully support this thesis. The research results are of value,

however, with respect to other important conceptual features related to the overall study

of the impact of higher education within the U. S. Army. See Tables 2 and 3 below for

information concerning the demographics of the respondents.

This study investigated the following overarching question: Within a U. S. Army

unit, what are the possible linguistic transmutations that may occur between officers and

senior enlisted personnel during the idea-transmission process? Specifically, what

Table 2

Officer Respondent Demographics

RESPONDENT NUMBER	APPROXIMATE AGE	EDUCATION LEVEL	GENDER	ETHNICITY
1st Officer	24	College (four years)	Male	African-Am
2nd Officer	31	College (four years)	Male	Caucasian
3rd Officer	38	College (two years)	Male	Caucasian
4th Officer	57	College (Master's)	Female	Caucasian
5th Officer	36	College (four years)	Female	African-Am

Table 3

Enlisted Respondent Demographics

RESPONDENT NUMBER	APPROXIMATE AGE	EDUCATION LEVEL	GENDER	ETHNICITY
1st Enlisted	27	High School	Male	Caucasian
2nd Enlisted	30	Master's	Male	African-Am
3rd Enlisted	23	College (two years)	Female	Caucasian
4th Enlisted	26	College (four years)	Male	Latino-Am
5th Enlisted	24	College (two years)	Male	Caucasian
6th Enlisted	24	College (two years)	Male	African-Am

possible semantic misinterpretations may surround various metaphors used between officer and senior enlisted cadre during the diffusion process associated with conveying the value for lower-enlisted personnel to pursue the opportunity to engage in the Army's ACES professional development program? This study was divided into two tiers. The first tier addressed the following sub-question for both officers and enlisted personnel:

1. What metaphors or terms are used by the officer cadre to describe how higher education serves lower ranking enlisted personnel in their role in the overall Army mission relative to developing critical thinking skills within increasingly technologically sophisticated combat environment?

2. What metaphors or terms are used by senior enlisted cadre to describe how higher education serves lower ranking enlisted personnel in their role in the overall Army mission relative to developing critical thinking skills within increasingly technologically sophisticated combat environment?

Tier Two

The following question was posed to select members taken from both officer and enlisted interviewees:

What, if any, lexical argots exist within officer and senior enlisted sociolects that may create semantic misinterpretation of metaphors applied to the ACES and its role within the U.S. Army? That is, how do officers and senior enlisted personnel interpret each other's metaphors?

Data Analysis

The following is a detailed analysis by sub-question for officer interviewees to be followed by a detailed analysis of senior enlisted personnel. An analysis of the overarching research question will conclude the data analysis section.

Detailed Analysis of Officers

What metaphors or terms are used by the officer cadre to describe how higher education serves lower ranking enlisted personnel in their role in the overall Army mission relative to developing critical thinking skills within increasingly technologically sophisticated combat environment?

To obtain an answer to the first sub-question, the interviewee's were asked: "What do you think would be the benefits of the ACES for lower ranking personnel regarding their performance on the battlefield?"

Several recurring terms emerged in response to this question. One officer connected education (or the effort in attaining higher education) as being related to the need to be "persistent" in a battlefield environment. This theme was set in the term/phrase jargon of most respondents and was repeated frequently, in the words of one officer as "suck it up, drive on,"(1st Officer). Another theme emerged which suggested that education provides a means of becoming "proactive" on the battlefield and "gives you a strategy [mindset] on the battle field," one that allows you to "look at the whole pitcher [sic]"(3rd Officer). Also metaphors were used to convey the need in a battlefield environment to remain alert to alternative opportunities. These metaphors included: "you understand on a higher level" (5th Officer) and "makes a difference in the level of [one's] understanding" (5th Officer) (see Table 4).

Table 4

Officer Interview Results

Metaphors	Terms and Phrases
• You can help better yourself	• Opportunities
• Giving yourself a certain amount of discipline	• Get 'em motivated
• Learn a professionalism with the education	• Suck it up, drive on
• I can step back and forth	• Gives you strategy
• Put yourself on the same floor with the same person	• Benefit
• Talkin' at their level	• Accelerate
• The only way you wuh gonna git up thoo is to, is to educate yo'sef	• Advancement
• Big picture, not that tunnel vision	• Explorations
• Broaden your horizons	• Persistent
• Look at something from this angle, not just one with the blinders on	• Proactive
• Look at the whole pitcher [sic]	
• Start those little building blocks	
• You got processed to learn, instillin' ways to make you learn, uh, like givin' you an avenue to learn	
• Working toward their degree	
• Key to the future	
• Accelerate in their rank	
• Get up in their rank	
• Open up other avenues so they don't get stuck in one track	
• Broader path	
• And that's how continuing education is, it keeps branching out	
• It opens you up to different avenues so that you're not stuck	
• Open up your mind	
• You can tap resources that have never been tapped	
• All of a sudden the light comes on	
• You understand on a higher level	
• Makes a difference in level of understanding	

The metaphors uncovered during the officer interview process indicated several approaches set in metaphorical phrase that supported the overall positive attitude held by the respondents regarding the benefits of education in general, and higher education in particular for lower ranking personnel in a combat environment. One centered on the need in combat to cope with stress, and another concerned the need in combat to maintain an open mind and a willingness to seek alternative actions.

1. "Giving yourself a certain amount of discipline…" (2nd Officer). The context of this metaphor was used by the interviewees to connote that combat is a stressful environment, and that going to college, or making the effort to attain additional education, is also stressful. The interviewees (without exception) associated attaining an education with stress and that the process of obtaining an education would help prepare lower ranking personnel for the stress of combat.

2. "Big picture, not that tunnel vision…" (3rd Officer). The context of this metaphor was used by several interviewees to connote how they associate education (particularly higher education) with providing lower enlisted personnel a way to "broaden your horizons," (3rd Officer) and "look at something from this angle, not just one with blinders on" (5th Officer).

To probe further into sub question one, interviewees were asked:

"In general terms, how would you describe the ACES program to senior enlisted personnel?" [This question was prefaced by asking the interviewee to reflect on how they felt about education in general and its relationship to the overall military mission.]

Several recurring terms emerged. One was "benefit (5th Officer)" and others were "opportunities" (2nd Officer) and "advancement" (5th Officer). Each of these terms was

connected foremost to rank attainment, and secondarily to gaining knowledge (see Table 4).

The metaphors uncovered during the officer interview process indicated an overall positive attitude held by the respondents regarding the benefits of education in general, and higher education in particular. The association of education and rank remained constant throughout. All of the officer respondents used metaphors that indicated that education, particularly higher education, was a positive activity for anyone willing to engage in it.

The interviewees associated education with status in several ways. For example, "learn a professionalism with the education"(1st Officer); "the only way you wuh gonna git up thoo is to, is to educate yo'sef"(3rd Officer), "start those little building blocks," "key to the future" (4th Officer), "accelerate your rank"(5th Officer) "get up in rank" (5th Officer) and lastly, "it opens you up to different avenues so that you're not stuck."(5th Officer).

Metaphors that were noted connecting education to personal advancement and enhancement included: "you can better yourself" (2nd Officer), "you're processed to learn, instillin' way to make you learn, uh, like giv'n you an avenue to learn" (3rd Officer), "broader path"(5th Officer), "open your mind" (5th Officer), "you can tap resources that have never been tapped" (5th Officer), " it opens you up to different avenues so that you're not stuck " (5th Officer), and "all of a sudden the light comes on...."(5th Officer). There were also metaphors noted that associated education with communication and critical thinking skills, such as: "I can 'step back and forth' [speak to different groups, using different lexical registers]" (1st Officer), "Put yourself on the same

floor with the same person"(3rd Officer) and "talk'n at their level"(3rd Officer).

Metaphors connecting education to military advancement included "get you up in rank"

(4th Officer), and "accelerate in your rank"(5th Officer).

Detailed Analysis of Enlisted Personnel

The following is an analysis by sub-question posed to enlisted personnel.

What metaphors or terms are used by the senior enlisted cadre to describe how higher

education serves lower ranking enlisted personnel in their role in the overall Army

mission relative to developing critical thinking skills within an increasingly

technologically sophisticated combat environment?

To obtain an answer to the first sub-question, the interviewees were asked:

"What do you think would be the benefits of the ACES program for lower ranking

personnel regarding their performance on the battlefield?"

Several terms emerged in response to this question. One connected education (or

the effort in attaining higher education) as being related to the need to have "perspective"

[in a battlefield environment] (4th Enlisted). This term/phrase theme was repeated in

phrases such as "clarity of thought" (3rd Enlisted), "processed" (3rd Enlisted), "focused,"

[that combat required a] "thinking man" (6th Enlisted) and that combat required a person

to be trained to be "calculated"(3rd Enlisted) and accepting of "challenge" (4th Enlisted).

Another theme reported suggested that education provides a means of becoming

"disciplined"(6th Enlisted) on the battlefield and gives a solider a "mindset" on the battle

field that helps him/her "exude confidence" [related to leadership] (3rd Enlisted) (see

Table 5).

Table 5

Enlisted Interview Results

Metaphors	Terms and Phrases
• Further your career	• Career
• Putting things in order	• Ground-pounders
• Being more detailed	• Book smarts
• You're gonna be able to keep yourself together	• Advantage
• (ACES) is a free ride to a college degree	• Stagnant
• It's a open door	• Perspective
• (With education) you can go real far	• Mindset
• (In combat) you have to be on top of your game mentally	• Focused
	• Challenged
• You'll be able to clarify your thoughts a lot better	• Clarity of thought
• You've learned things through a "trials and tribulations" concept, and then, in combat, it's the same	• Achieve the objective
	• Advance
	• Calculated
• Faced it ("facing" the challenges of education apply to confronting the challenges of combat)	• Processed
	• Exude confidence
• Work your way through it	• Enhance me
• Broadens your horizons	• Thinking man
• Improve yourself	• Opportunity
• (Higher education helps you) to really get along in life	• Reward
• Come across better	• Discipline
• Broader spectrum	
• (With education) the sky's the limit	

Several terms and phrases emerged regarding how enlisted personnel connected education to the military in general. Unlike the officers, the enlisted interviewees associated education and the military to rank attainment and gaining personal knowledge as one and the same activity; one was not seen as primary over the other.

The following terms and phrases indicated to the researcher that the concepts of "career" and "education" were connected in a positive manner by nearly every enlisted interviewee. This inference was conveyed in the terms such as "advantage," "opportunity," and "reward." It was insightful to note that virtually every enlisted interviewee made reference to attaining more education as a means of becoming a better leader. As one interviewee put it, "...you can't be an effective leader if you have not educated yourself..."(3rd Enlisted). In sum one interviewee commented, "...we're now, um, a forward mobile force, we gotta move real quick, which means we need smarter soldiers, I mean, not just like street smart, but you need a lot of book smarts to be in the Army now" (5th Enlisted). and, "...ground-pounders are now carrying computers" (2nd Enlisted).

The metaphors uncovered during the enlisted interview process indicated a positive (overall) attitude held by the respondents regarding the benefits of education in general, and higher education in particular regarding lower ranking personnel in a combat environment. Several of the metaphors centered on the need in combat to cope with the stress of combat. These metaphors include: "you're gonna be able to keep yourself together" (1st Enlisted), "face it" [as in how facing the challenges of education apply to confronting the challenges of combat] (4th Enlisted), "you'll be able to clarify your thoughts a lot better" (4th Enlisted). Another phrase was "[through education] you've

learned things through a 'trials and tribulations' concept, and then, in combat, it's the same," "work you [sic] way through it," [in combat] "you've got to be on top of your game"(5th Enlisted), and "being more detailed [in your thinking] (1st Enlisted) and, "putting things in order" (1st Enlisted). Without exception, the enlisted interviewees indicated that education was related to coping with stress and change, and a means of attaining better critical thinking skills as they relate to life in general, and the stresses of combat.

To probe further into sub-question one, enlisted interviewees were asked:

"In general terms, how would you describe the ACES program to officers?" [Asking the interviewee to reflect on how they felt about education in general and its relationship to the overall military mission prefaced this question].

A positive association of education and rank remained constant with all enlisted interviewees. All of the enlisted respondents used metaphors that indicated that education is difficult to attain, but led to a positive outcome. The metaphors used to convey this were: [helps you] "further your career, " (1st Enlisted), "it's a open door" (2nd Enlisted), "broadens your horizons" (3rd Enlisted), "improves yourself," [higher education helps you] (6th Enlisted), [with more education] "…you can go real far" (5th Enlisted), [helps you] "come across better" (6th Enlisted), [with education you have a] "broader spectrum" (6th Enlisted), "the sky's the limit" (6th Enlisted), and [ACES] "is a free ride to college" (2nd Enlisted).

Tier Two Sub-question:

What, if any, lexical argots exist within officer and senior enlisted sociolects that may create semantic misinterpretation of metaphors applied to the ACES program and its

role within the U.S. Army? That is, how do officers and senior enlisted personnel

interpret each other's metaphors?

To obtain an answer to the second sub-question, officer and enlisted interviewees were

asked how they would they would interpret a list of metaphors and terms (see Table 1). In

both sociolects (officer and enlisted) metaphors and terms were expressed in nearly

identical ways. Both sociolects seemed to have shared lexical sets, and did not indicate

semantic interpretation difficulty. All respondents indicated similar descriptive imagery

for all of the metaphors and terms (see Table 1) about which they were asked to

comment. For example, the notion that formal education—higher education in

particular—was portrayed as a forward, positive vehicle for attaining a worthwhile goal.

Secondly, the metaphorical imagery of education provided foundation upon which to

build critical thinking and processing information under stress was rife throughout nearly

every interview, and was supported in the literature as well.

In sum, most respondents from both officer and enlisted interviewees provided

similar responses indicating that they concurred that higher education has merit in the

professional development and preparation for lower enlisted personnel being trained to

cope in a combat environment. When asked to define a list of terms gathered from other

respondents, the interviewer was satisfied that both officer and enlisted interviewees fully

comprehended and understood both the potential connotative as well as denotative

meaning of the lexical set they were asked to define.

Analysis of Overarching Research Question

The results of the present study do not indicate that for the samples used, there

were any linguistic transmutations that would contribute to potential miscommunication

between officer and enlisted sociolects. Both samples indicated that there were no differences in how their respective sociolects perceived or would convey via metaphor and/or lexical set the merits of higher education for lower ranking enlisted personnel.

Summary

The present study was predicated on research indicating that military rank status and socio-economic differences tend to generate miscommunication between subcultures; the results obtained in this study did not totally support this assertion. Unexpectedly, however, both officer and enlisted samples either alluded to, or stated forthrightly, that level of formal education has in their view an intrinsic status component that often paralleled (if not superseded) the traditional military ranking system. Most respondents supported this idea to the present rank-attainment protocols linked to level of formal education. Further, it was noted that formal education was developing as a credible method for obtaining a greater ability to engage in critical thinking under stress, and thus was seen as an important leadership tool in general, but particularly in a high-technology intensive combat environment.

None of the interviewees reported having difficulty understanding the metaphors and/or lexical sets used by either officer or enlisted personnel. The proposition that some level of ambiguity between officer and enlisted sociolects exists in the U.S. Army was not supported in the present research. The present research did not indicate that enlisted personnel were in any way more negative toward higher education than officers. On the contrary both officer and enlisted resonated a positive attitude toward extending higher education throughout all ranks of the military, and were supportive of extending opportunities for attaining higher (college level) education into the lower enlisted ranks.

CHAPTER V

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

Summary

Of the many human endeavors affected by the unprecedented growth in information technology over the last forty years, how warfare is conducted in the 21st century ranks among the most significant. Although laser-guided munitions and unmanned surveillance devices often receive much attention, the human communication components that oversee such innovations have also been dramatically impacted. In concert with the civilian sector, America's military leaders have initiated programs over the last forty years to promote higher education. These military education programs have, however, been primarily dedicated to the educational improvement of the officer cadre. Following the Gulf War the U.S. Army recognized that the complex technology being used in modern warfare demanded a more sophisticated frontline solider. This realization marked the end of an era for America's military; the uneducated, essentially expendable, foot solider, is now a much more integral part of U.S. Army command structure.

Not only have the U.S. Army's educational entrance requirements become more stringent, but also every unit in today's military is now mandated to initiate continuing educational programs aimed at professional development and rank advancement. One example of such efforts is the Army Continuing Education System (ACES) program.

Initiated in 2000, the ACES program is reported to have a positive impact on the U.S. Army.

The mission of the ACES program is to provide college and university level continuing education to further the Army's professional development agenda. One of the objectives of the ACES program outlined in their Mission Statement is to reach every sector of the Army's ranks and provide them with the critical thinking skills that have long been associated with higher-ranking command. The launching of Sputnik in 1957 is often credited with bringing America into the Information Age and creating the nation's expanding interest in higher education. Students of American education, however, see the roots of this trend embedded in Thomas Jefferson's vision of democratizing college and university level education, and the decision-making capability associated with it. The ACES program is an example of how America's military leaders have come to embrace Jefferson's idea and set in motion programs to expand the purview of their decision-making capability to every level of their command.

The present study was predicated on research supporting the notion that socio-economic differences tend to undermine communication within social subcultures. The rationale supporting this idea notes the existence of generally discrete sociolects that contain lexical sets, which in turn, create margins of lexicon-related semantic ambiguity for other sociolects. Miscommunication based on semantic ambiguity is considered to be common between sociolects that have a wide margin of formal educational differences. The cultural gap between officer and enlisted personnel in the U.S. Army was thought by the researcher to be an appropriate sociolect differentiation that would reflect at least some degree of sociolect miscommunication. The sample used in the present study was

drawn from an Army unit on its way to being deployed into a hazardous overseas environment. Although the composition of the sample the researcher was given permission to interview did not indicate the socio-economic disparity research suggests may contribute to sociolect miscommunication, the sample did reflect a reasonable degree of socio-economic differences to the extent that the rationale upon which the present study was constructed is considered to have merit.

The connection between level of education, lexical repertoire, critical thinking skills, and general leadership ability was reported by the study sample as being well grounded within the modern military culture. And, from a diffusion of innovations standpoint, the congruity in metaphor applications or particular term or phrases between officer and senior enlisted sociolects (regardless of the particular unit) is seen as a positive indicator for the ongoing infusion of educational programs such as ACES in the U.S. Army. The results of this study suggest that due in large measure to continually advancing communication dissemination technology such as increasingly more portable and more powerful personal computers, that over time the propagation of higher education into the lower enlisted ranks will likely become commonplace throughout the U. S. military. And with advances in distance learning technology expanding at a near geometric rate, this circumstance may conceivably take place within the very near future.

Although the sociolect component was not fully supported, another unexpected education-centered dynamic emerged in the course of this study that is considered worthy of further investigation. Both officer and enlisted interviewee's indicated that higher education was an important requirement for the high-tech battlefields of the 21st century was interesting. Corresponding to this position is the discovery that level of education

and military rank attainment seems to be merging as indicators of legitimate power within the military. Although this later circumstance may have been an artifact of the sample used in the present study, the researcher is of the opinion that it may be generally pervasive throughout the U.S. Army, and the U.S. military overall. But what was not expected was that education was consistently cast by both officer and senior enlisted personnel as a newly emerging means of asserting informal power; thus, giving education the unintended outcome of becoming a possible dismantling factor of the traditional rank-status structure of the U.S. Army as it presently exists. One of the outcomes of higher education is that it works to differentiate into specialized scholarly endeavors.

Each college within the university is dedicated to a particularly academic area, and each department within each college continues this specialization into various vocational fields of expertise. With the technological advances that are being integrated into the military, the same specialization process is beginning to emerge. Specialization has a de facto association with exclusionary knowledge bases that work to segment organizations into increasingly differentiated sectors. The era of the generalist in private organizations has long-since past; this same circumstance is rapidly emerging within the U.S. military. As a result, the organizational structure of the military is increasingly taking on the attributes of its private sector counterpart. This insight may be a signal for civilian educational administrators to take a more active role in educational programs such as ACES and initiate closer contact with America's military establishment. Jefferson's vision may very well have made its way into the military personnel readiness agenda, and therefore placed education in a position of prominence never before experienced in military history.

Conclusions

The present study was designed to explore how a sample unit within the U.S.

Army used metaphors to convey their predispositions toward (or against) higher

education in general, and how they might characterize the impact of higher education on

lower ranking enlisted personnel confronting a combat environment. In sum, both officer

and enlisted respondents provided metaphors that indicated a positive perspective on

education in general, and the education of lower ranking personnel in particular.

Information related to the more macro-organizational insights were uncovered in the

course of this study, which itself may have important implications for the future of

America's military establishment, particularly those aspects that center on America's

present and future military educational mandates.

The present research did not support the notion that sociolect differences seem to

impede communication between the officer and senior enlisted personnel. The sample

used in the present study may not have reflected the margin of educational disparity one

might find in, say, an infantry unit. And for this reason, the researcher is concerned that

the data collected in the present study may not adequately reflect the metaphorical

patterns that may be used by "ground-pounders (1st-E)," as frontline infantry units are

often referred to, or other more direct-combat units such as artillery or combat engineers.

The present study did, however, uncover an unexpected insight into how the notion of

higher education may be perceived by members of today's modern U.S. Army. This

insight centers on the increasing knowledge specialization movement that has been long

associated with the private (business) sector of society; a movement that due to

increasingly more technologically advanced warfare hardware demands a more highly specialized level of education within the military.

What was noteworthy is that both officer and enlisted interviewees provided metaphors supportive of the notion that higher education is superseding high school as America's educational standard. The present study intended to explore the interpersonal communicative nuances that may contribute to small group and interpersonal miscommunication, the macro (organizational) picture was considered secondary. Contrary to an extensive body of research reviewed in both Chapters I and II of this documented, the interview results obtained in the present study indicate that there were no sociolect differences between the sample populations used in the present study. The insights obtained in the present study point to the existence of a sub-stratum of informal power centered on levels of specialized education within the U.S. Army that now gives level of education primacy over traditional military rank; a phenomenon that, from this researcher's perspective, is worthy of further study.

Implications

At present, the United States is operating in what many consider to be a state of war. This psychosocial condition heightens the perceived need within civilian and military sectors to emphasize national security and personal survival. The survival imperative is considered by students of the diffusion of innovation process as a primary force required to overcome long-standing social traditions. The creation of a more educated, better prepared and more appreciated lower ranking military cadre is an example of the sort of social change that can occur when the survival imperative operates. The researcher agrees with other students of information dissemination that

ambiguity between sociolects can have the effect of undermining communication clarity, thus inhibiting the diffusion of innovation process.

The present research was dedicated to uncovering lexical/conceptual nexus points that may operate within metaphors used by officer versus senior enlisted sociolects in a U.S. Army unit at Fort Gordon, Georgia. The metaphors that emerged out of this study were used by the respondents to convey in their words the role of higher education in the overall military mission, particularly regarding how higher education is linked to the development of critical thinking skills of lower enlisted soldiers in a combat environment. The metaphors used characterized perceptions of positive or negative points of view regarding the role of higher education and its infusion into the lower ranking personnel military forces. The present research examined the ACES program through the lens of the diffusion of innovation model. In spite of the wide-range of research that has emerged from the study of the diffusion of innovations, the present research is the first to date that has explored the role of the metaphor as a linguistic medium operating within this well-established information dissemination model.

Thomas Kuhn (1970) points out that there is great value in reflecting on anomalies that occur during the course of normative research. For Kuhn, even a slight aberration may be the seedling of a future paradigm shift. In the present research, one such unexpected outcome occurred. All interviewees asserted (in one fashion or another) that the Army seemed to be undergoing a shift away from the long-standing, traditional ranking/status system and toward an educational-level status structure as a result of programs such as ACES. From the perspective of the respondents, military rank and level of education are closely aligned within the organizational milieu of the U.S. Army. The

results of the present study lend support that time-in-grade, a long-used mechanism for rank/status attainment, has faded with the introduction of mandated educational programs such as ACES, and with this passing may go a well-entrenched pattern of organizational communication in the U.S. Army, one of America's largest, most diverse public service institutions. From the standpoint of the infusion of higher education into the U.S. Army the present study provides some evidence that additional programs similar to ACES will become implemented, sooner rather than later.

Significance of the Study

The modern battlefield is not only the most sophisticated and highly technologically complex warfare arena in human history; it is also the first to have a direct communication capability to integrate every level of command in real time. As a result, the level of critical thinking skills demanded of the modern-day frontline enlisted combatant is as important to the success of the battle engagement outcome in a way that was once only relegated to officer ranking personnel. This circumstance demands that present day personnel development programs impress greater demands upon lower enlisted personnel to successfully engage in higher education.

Over the last decade the U.S. military and America's institutions of higher education have made significant strides toward creating partnerships to provide educational opportunities for both active and reserve military personnel. However, since the mandate to incorporate higher education into the military is a departure from traditional military culture, there exists the possibility of a long-standing rift within the military command levels regarding the merits of this newly evolving personnel training mandate. Of the various communicative vehicles available for infusing higher education

into the ranks of the lower enlisted personnel, the metaphor is considered among the most frequently employed, due to its characteristic of conveying unfamiliar concepts by way of connecting attributes of similar concepts, a process commonly employed in cross-culture communication. The present study provided a theoretical basis and demonstrated that there exists differing sociolect mediums, but more importantly that such communication platforms such as the metaphor can be culled out of specific speech communities to determine nexus points of metaphorical miscommunication. The present study is the first to directly connect the diffusion of innovation process with the linguistic stylistic of the metaphors used by officer and senior enlisted personnel as they attempt to convey their perception of the role of higher education in the U.S. Army mission.

The present research will to be brought to the attention of several key factions within the United States government. The Army's Department of Education, for example, that oversees   Army Continuing Education System (ACES) as well as the Navy's Program for Afloat College Education (PACE) will be made aware of the results of the present study. The information derived from the present study will help create a level of awareness concerning the problems confronting the infusion of higher education programs into the military and those bodies of government chartered to oversight the efficacy of these infusion programs. Included in this distribution will be the Congressional Committee on Military Affairs and Appropriations, as well as top command officials within the Pentagon to create awareness that policy agenda mandates are potentially confronting sociolect conflicts that if uncovered, can be resolved.

At the military base level, a summary of the present research should be made available to both officer and senior enlisted base command, and distributed to both officer

and senior enlisted battalion and company commanders. It is felt that by doing so would create a heightened level of awareness to the possibility of miscommunication between officer and senior enlisted command levels regarding the merits of higher education and the overall military mission. Although there exists sparse formal research as evidence that there exists a communication impasse within the military rank levels regarding the efficacy of higher education, the possible magnitude of this circumstance is attested to from personal experience of this researcher.

<div align="center">Future Research</div>

Although an important unexpected insight regarding the organizational configuration of today's U.S. military emerged from the present study, there remains further research to be explored regarding the sociolect differentiation that may exist between officer and senior enlisted ranks. Future research is suggested to explore how officer and enlisted sociolects communicate the notion of higher education and its merits for lower ranking enlisted personnel. In addition, future research is suggested to explore the potential of an education-level status conflict that could impact how educational administrators approach the infusion of higher education within the U.S. Army, and other military institutions as well. Future research is intended to further probe the question of to what extent or whether more educationally challenged senior enlisted personnel operating in a wider range of Army units would respond to the infusion of educational programs such as ACES being implemented into the lower enlisted ranks? From a diffusion of innovations vantage point, if the latter concern points to some measure of resistance, how will senior enlisted personnel (traditionally cast as key change agents within the military) convey an innovation (higher education) that many have never experienced? If indeed

education specialty levels are a source of the conflict within the U.S. military, an overarching future question might be, will higher education affect both inter-personal and group organizational communication patterns within the modern U.S. military? A few of the foundations spawning the above questions follow.

The U.S. military has a highly stratified organizational structure held in place by interwoven near-peer-group cells that share a combination of semiotic and semantic commonalities based on a wide range of different primary and secondary socialization processes. Level of formal education has traditionally been a key factor separating the multiple levels of rank-grade cultures found in the military. Two major rank subcultures stand out. One is the officer personnel, and the other is the senior enlisted. Within the military organizational environment the highly structured socio-class separation between officer and enlisted personnel is maintained by a rigid communication code. These separate communication modalities often work to create sub-cultures, which in turn construct and maintain their own sociolects, which in turn generate sociolect-specific metaphors. Margins of ambiguity, which are set by convention, operate at every level of human communication. Though ambiguity may work to facilitate meaning-conveying idioms, it is equally likely to contribute to miscommunication between sociolects.

One linguistic stylistic that often works to bind these otherwise different sociolects is the metaphor. However, due to subculture lexical set semantic differentiation, the potential for miscommunication between sociolects, particularly when set in the complex stylistic of the metaphor, is very high. Compounding this circumstance is the observation that within the military there is a tendency to discount, or even disallow, opportunities for clarifying mediums such as reiteration and redundancy

between the various ranking hierarchies. Many communication theorists contend that miscommunication between sociolects is particularly impacted when both subcultures feel that they share a common understanding of a topic, when in fact they do not as a result of having fundamentally dissimilar worldviews.

A key element of change agent communication exchange is the extent to which the change agent shares near-peer linguistic stylistics. Students of the diffusion of innovation model agree that the one-to-one nexus of interpersonal communication is the epicenter of the information transfer process. Future research would continue to take this into account. However, since sociolinguistic research supports the idea that differing sociolects tend to have wide margins of semantic ambiguity separating their respective lexical sets, and that it is within these lexical sets that metaphors are created, future research will sample combat arms units where officer and enlisted personnel have traditionally had a wider gap of educational difference. Future research will also focus on long-term enlisted, professional personnel. It is speculated that metaphors obtained out of such populations may more closely support the notion that education level and rank have an impact on perceptions of higher education within the U.S. Army.

Dissemination

The present study suggests that one of America's largest and most diverse public service institutions, the U.S. Army may be undergoing significant changes over the next few years. A discussion of the possible underlying implications of the foundational metaphors upon which the present data set rests is considered by this researcher to have an important bearing on the issue of infusing higher education (ACES, as one example) into the U.S. Army specifically and into the U.S. military establishment in general.

Organizations, such as the U.S. Army, operate within highly ritualized markers of hierarchy and most programs challenging long-standing organizational culture is likely to meet with resistance. The infusion of higher education into the lower enlisted ranks however necessary to the demands of a technology driven warfare environment, tends to contradict the historical foundations of the military's organizational culture. Dissemination of the underlying thesis of the present study underscores both Kuhn's (1970) and Cohen's (1986) notion that contra-normative innovations are often the impetus of scientific paradigm shifts supporting continuing worldview revolutions.

Information gained from this research may contribute to the development of military standard operating procedures (SOPs) with the objective of creating a more uniform infusion of higher education into the professional development programs of the U.S. Army command, and ultimately throughout all branches of the U.S. military as an inducement to maintain career status. The current research contributes to the growing body of knowledge pertaining to diffusion of innovations within organizations, and it will (hopefully) facilitate communication between civilian educational administrators and military leaders, and thereby further the Jeffersonian ideal of the democratization of higher education—and in great measure all this is due to a spectacular technological achievement that careened across the night sky in 1957, Sputnik.

References

Allen K. (1986). <u>Linguistic meaning</u>. New York: Routledge & Kegan Paul.

Allen K., & Burridge, K. (1991). <u>Euphemism and dysphemism.</u> New York: Oxford Press.

Alvesson M., & Stanley D. (1999). Critical theory and postmodernism: Approaches to organizational studies, (pp. 185-211). In Clegg, S., and Hardy, C., (eds.), <u>Studying organization: Theory & Method.</u> London: Sage Publications.

Anderson S. (1985). <u>Phonology in the twentieth century.</u> Chicago: University of Chicago Press.

Anderson S., & Keenan E. (1985). Tense, aspect, and mood, (3) 202-258. In Timothy Shopen (ed.), <u>Language typology and syntactic description.</u> Cambridge: Cambridge University Press.

Atkinson J., & Heritage J. (1984). <u>Structures of social action: Studies in conversation analysis.</u> Cambridge: Cambridge University Press.

Atwater S. (1999). A longitudinal study of the leadership development process: Individual differences predicting... <u>Human Relations. (52)</u>12, 15-23.

Bacharach S., & Lawler E. (1981). <u>Bargaining.</u> San Francisco: Jossey-Bass.

Balase J., & Balase J. (1995). The micropolitics of successful supervior-teacher interaction in instructional conferences, (pp. 55-70). In David Corson (Eds.), <u>Discourse and power in educational organizations.</u> New Jersey: Hampton Press.

Ball T., & Dagger R. (1991). <u>Political ideologies and the democratic ideal.</u> N Y: HarperCollins Publishers.

Bardach E. (1995). The implementation game, (137-139). In Theodoulou, S., and Cahn, M., (eds.), <u>Public policy: The essential readings.</u>

Barkow J., Cosmides L., & Tooby T. (1992). (Eds.), <u>The adapted mind: evolutionary psychology and the generation of culture.</u> N Y: Oxford University Press.

Beck U. (1986). <u>Risk society: Towards a new modernity.</u> London: Sage Publications.

Beebe S., Beebe J., & Redmond M. (1996). Interpersonal communication: Relating to Others. Boston: Allyn and Beacon.

Berger P., & Luckmann T. (1967). The social construction of reality. NY: Anchor.

Bernstein A., & Eaton J. (1994). The transfer function: Building curricular roadways across and among higher education institutions, (pp.139-150). In Manuel J. Justiz, Reginald Wilson, and Lars G. Bjork, (eds.), Minorities in higher education. Phoenix, AZ.: The Oryx Press.

Berquist W. (1993). Postmodern thought in a nutshell: Where art and science come together, (pp. 578-591). In Jay M. Shafritz and J. Steven Ott, (eds.), (1996), Classics of organizational theory (4th ed.). London: Harbrace Brace College Publishers.

Biber D., & Finegan E. (eds.), (1993). Sociolinguistic perspectives on register. New York: Oxford University Press.

Bigge M., & Shermis S. (1998). Learning theories for teachers. (6th ed.), NY: Longman.

Blumer H. (1969). Symbolic interactionism. New Jersey: Prentice Hall.

Boden D. (1988). The business of talk: Organizations in action. Cambridge: Polity.

Bok S. (1978). Lying: Moral choice in public and private life. NY: Pantheon.

Bolinger D. (1986). Intonation and its parts: Melody in spoken English. Stanford: Stanford University Press.

Bolton W. (1982). A living language: The history and structure of English. New York: Random House.

Boorstin D. (1998). The seekers: The story of man's continuing quest to understand his world. NY: Vintage.

Boorstin D. (1993). The creators: A history of heroes of the imagination. NY: Random House.

Boorstin D. (1985). The discoverers: A history of man's search to know his world and himself. NY: Vintage.

Borgason P. (2001). Postmodernism and American public administration in the 1990s. Administration & Society, (33)2, 165-193.

Bourdieu P. (1994). Power and the reproduction of social structure and culture: Pierre Bourdieu. In Munch (Ed.), Sociological theory development since the 1960's, (3), (pp.139-157) Chicago, IL: Nelson-Hall Publishers.

Boyer C., & Merzbach U. (1991). A history of mathematics, (2nd ed.). NY: John Wiley & Sons, Inc.

Breneman L, & Anderson R. (eds.), (1993). Finance in higher education. Needham Heights, MA: Simon & Schuster.

Brown A., Cervero M., & Johnson-Bailey J. (2000). Making the invisible visible: Race, gender, and teaching in Adult Education. Adult Education Quarterly, 50(4), 273-288.

Brown G., & Yale G., (1983). Discourse analysis. Cambridge: Cambridge University Press.

Brown P., & Fraser C., (1979). Speech as a marker of situation. In Klaus Scherer, & Giles, H., (eds.), Social markers in speech. Cambridge: Cambridge University Press.

Bryman A. (1999). Leadership in organizations, (pp.26-42). In Stewart R. Clegg, Cynthia Hardy, & Walter R. Nord, (eds.), Managing organizations: Current issues. London: Sage Publications.

Buenker J., & Ratner L. (1992). Multiculturalism in the United States. New York: Greenwood Press.

Burdin J. (1994). Leadership and diversity in education. Lancaster, England: Technomic.

Burdin J. & Hoyle R., (eds.), (1994). Leadership and diversity in education. Lancaster, England: Technomic

Burns, M. (1978). Leadership. New York: Harper & Row.

Burt R. (1982). Toward a structural theory of action. New York: Academic Press.

Capper C. (1993). Educational administration in a pluralistic society: A multiparadigm approach."In Capper (eds)., Educational administration in a pluralistic society, (pp. 7-35) Albany, NY: State University of New York Press.

Carnevale D. (2003). Louisiana offers online study to military personnel in Iraq. The Chronicle of Higher Education. [On-line] Available: http://chronicle.com/free/2003/03/2003033101t.htm

Chen E., & Gooch J., (1990). Military misfortunes: The anatomy of failure in war. NY: Free Press.

Chomsky N. (1968). Language and mind. New York: Harcourt Brace.

Christopher P. (1999). The ethnics of war & peace: An introduction to the legal and moral issues. (2nd ed.)., N J: Prentice Hall.

Clark M., & Garza H. (1994). Minorities in graduate education: a need to regain lost momentum. (pp. 297-313). In Manuel J. Justiz, Reginald Wilson, and Lars G. Bjork, (eds.), Minorities in higher education. Phoenix, AZ.: The Oryx Press.

Cohen I. (1985). Revolution in science. London: Belknap Press.

Coleman, J. (1995). Human action as rational choice: James Coleman. (pp. 201-213). In Richard Münch (eds.), Sociological theory from 1850's to the present. Chicago: Nelson-Hall.

Collier M. (1995). "Dialogue and diversity: Communication across groups," In Harris (eds.), Multiculturalism from the margins: Non-dominant voices and difference and diversity, (pp.157-173). London: Bergin & Garvey.

Collins R. (1975). Conflict sociology: Toward an explanatory science. NY: Academic Press.

Coppa, R., & Gericke B. (2000). OPM (Officer Professional Management System) in a transforming army. Military Review, (80)5, 93-99.

Corson D., (1995). (Eds.) Discourse and power in educational organizations. NJ: Hampton Press.

Cosner L., (1956). The functions of social conflict. NY: Free Press.

Coutlhard M. (1985). An introduction to discourse analysis: New edition. London: Longman.

Cremin L. (1997). College. In The history of higher education. 2nd ed., (eds.), Lester F. Goodchild and Harold S. Wechsler. (pp. 35-54).

Croft W. (1990). Typology and universals. Cambridge: Cambridge University Press.

Cruse D. (1986). Lexical semantics. Cambridge: Cambridge University Press.

Crystal D. (1991). A dictionary of linguistics and phonetics. (3rd ed.), Boston, MA.: Blackwell.

Curtin P. (1984). Cross-cultural trade in world history. London: Cambridge University Press.

Dahrendorf R. (1995). A theory of domination and conflict: Ralf Dahrendorf. In Richard Munch (eds.), Sociological theory from 1850's to the present. (pp.201-213), Chicago: Nelson-Hall.

Dana M. (1999). The keys: Education and evaluation. Marine Corps Gazette; Quantico, 83(2), 32-33.

Darling-Hammond L. (1990). Instructional policy into practice: The power of the bottom over the top. Educational Evaluation and Policy Analysis 12(3), 233-241.

Department of Defense ACES Program. (2002), Vision, mission, & goals. Official U.S. Army Webpage. [On-line]. Available: http:www.armyeducation.army.mil/Vision_Mission.html

Department of Defense FM 34-3 Intelligence Analysis and Synthesis, (2002).

Dougherty D. (1999). Organizing for innovations. (174-189). In Stewart R. Clegg, Cynthia Hardy, and Walter R. Nord (eds.), Managing organizations: Current issues. London: Sage Publications.

Drew P., & Heritage J. (1993). Talk at work. Cambridge: Cambridge University Press.

Driscoll J. (2000). Developing joint education for the total force. JFO: Joint Force Quarterly, Spring Issue (24).

Dunn W. (1994). N J: Public policy analysis. Prentice-Hall

Duranati A., & Goodwin C. (Eds.), (1992). Rethinking context: Language as an interactive phenomenon. Cambridge: Cambridge University Press.

Dye T. (2002). Understanding public policy, (10th ed.). New Jersey: Prentice Hall.

Ebbesen G. (1996). Preserving educational benefits in the all-volunteer force. Defense Issues. (11)20.

Edwards G., Wattenberg M., & Lineberry R. (2002). Government in America: People, politics, and policy. N Y: Longman.

Edwards J. (1985). Language, society and identity. New York: Blackwell.

Efflandt S., & Reed, B. (2001). Developing the warrior-scholar. Military Review (81)4, 82-88.

Egidi R., (Ed), (1995). Wittgenstein: Mind and language. Doredrecht: Kluwer.

Eisner E. (Ed.), (1994). The educational imagination: On the design and evaluation of school programs. New Jersey: Prentice Hall.

Ellis A., & Beattie G. (1986). The psychology of language and communication. New York: Guilford.

Elshtain J. (1995). Democracy on trial. New York: Basic Books.

Etzioni A. (1995). (Eds.), New communitarian thinking: Persons, virtures, institutions, and communities. London: University Press of Virginia.

Fasold R. (1990). The sociolinguistics of society. Oxford: Blackwell.

Fay B. (1994). General laws and explaining human behavior. (pp. 91-110). In Michael Martin & Lee C. McIntyre (eds,). Readings in the philosophy of social science. London: The MIT Press.

Ferguson C., & Heath S. (1981). (Eds.), Language in the USA. Cambridge: Cambridge University Press.

Festinger L. (1957). A theory of cognitive dissonance. Stanford, CA.: Stanford

Finegan E. (1995). Language its structure and use. (2nd ed.). New York: Harcourt Brace.

Foley W., & Van Valin Jr., E. (1985). Information packaging in the clause, (3) 282-384.

Foucault M. (1984). The Foucault Reader. Rabinow (eds.), New York: Pantheon Book.

Fowler F. (2000). Policy studies for educational leaders. Columbus, OH. : Prentice Hall.

Fowler R., Hodge R., Kress G., & Trew T. (1979). Language and control. London: Rouledge.

Fox C. (1998). Postmodernity, reform fads, and program management: Presumptive consequentialism vs. discourse ethics. In J. Bowman and D. Menzel (Eds). Teaching ethics and values in public administration programs: Innovations, strategies, and issues, (pp. 232-253). NY: State University of New York Press.

Francis W. (1983). Dialectology an introduction. New York: Longman.

Franke V. (2001). Warriors for peace: The next generation of U.S. military leaders. Armed Forces & Society, (24)1, 25-33.

Frankfort-Nachmias C., & Nachmias D. (1996). Research methods in the social sciences. (5th ed.). NY: St Martin's Press.

Fraser N. (1995). Unruly practices: Power, discourse, and gender in contemporary social theory. Minneapolis, MN: University of Minnesota Press.

Frazmand A. (1999). The elite question: Toward a normative elite theory of organization. Administration & Society, (31)3, 321-360.

Fullan M. (2002). Change forces: Probing the depths of educational reform. London: The Falmer Press.

Fullan M. (1991). The new meaning of educational change. London: Falmer Press.

Gabriel Y., Finman S., & Sims D. (2000). Organizing & Organizations. (2nd ed.), London: Sage Publications.

Gannaway G. (1994). Transforming mind: A critical cognitive activity. London: Bergin & Garvey.

Gardner H. (1983). Frames of mind: The theory of multiple intelligences. NY: BasicBooks.

Geertz C. (1994). "A thick description: Toward a interpretive theory of culture," (pp.123.232). In Michael Martin and Lee. C. McIntyre (eds.). Readings in the philosophy of social science. London: The MIT Press.

Gibson D. (2000). Seizing the moment: The problem of conversational agency. (pp. 368-382). Sociological Theory. (18)3.

Gibson J., Ivancevich J., & Donnelly J. (2000). Organizations: Behavior, structure, processes, (10th ed.). Boston: Irwin Mcgraw-Hill.

Giddens A. (1987). Structuralism, post-structuralism and the production of culture. In J. Giddens and H., Turner (eds.), Social theory today, (pp.195-223) Cambridge, MA: Polity Press.

Glesne C. (1998). Becoming qualitative researchers: An introduction. (2nd ed.), N Y: Longman.

Goffman E. (1981). Forms of talk. Philadelphia: University of Pennsylvania Press.

Goffman E. (1974). Frame analysis: An essay on the organization of experience. New York: Harper & Row.

Goodchild L., & Wechsler H. (1989). (Eds.). The history of higher education (2nd ed.). Needham Heights, MA: Simon & Schuster.

Gray V., & Jacob H. (1996). (Eds.), Politics in the American states: A comparative analysis. Washington, D.C.: CQ Press.

Grice H. (1975). Logic and conversation. In Cole & Morgan, J.L., (Eds.). Syntax and semantics 3: Speech acts, (pp. 41-58). NY: Academic.

Gulick L., & Urwick, L. (1937). Papers on the science of administration. NY: Institute of Public Administration.

Gumperz J. (1982). Discourse strategies. Cambridge, England: Cambridge University Press.

Gumperz J. (1982). Language and social identity. Cambridge: Cambridge University Press.

Habermas J. (1994). The legacy of critical theory: Jurgen Habermas's theory of communicative action. In Munch (Ed.), Sociological theory development since the 1960s, (pp. 239-270). Chicago, IL.: Nelson-Hall.

Hall R. (1999). Organizations: Structures, processes, and outcomes (7th ed.), London: Prentice-Hall.

Halliday M. (1978). Language as social semiotic. London: Edward Arnold

Hanson R. (1996). Intergovernmental relations. In Virginal Gray, and Herbert Jacob, (eds.), Politics in the American states: A comparative analysis. (pp. 35-77). Washington, D.C.: CQ Press.

Hardy C., & Clegg S. (1999). Some dare call it power. (345-367). In Clegg, S., and Hardy, C., (eds.), Studying organization: Theory & Method. London: Sage Publications.

Harrington D. (2000). That '70's military is back? U.S. Naval Institute Proceedings 126(4), p.112.

Hastedt G. (1997). American foreign policy: Past, present, future. (3rd ed.). N J: Prentice Hall.

Hauptman A., & Smith P. (1994). Financial aid strategies for improving minority student participation in higher education, (pp. 78-106). In Manuel J. Justiz, Reginald Wilson, and Lars G. Bjork, (eds.), Minorities in higher education. Phoenix, AZ.: The Oryx Press.

Hayek F. (1994). The theory of complex phenomena. (pp. 55-70). In Michael Martin and Lee. C. McIntyre (eds,). Readings in the philosophy of social science. London: The MIT Press.

Hayes B. (1981). A metrical theory of stress rules. Bloomington: Indiana University Linguistics Club.

Henderson J., & Hawthorne R. (2000). Transformative curriculum leadership. (2nd ed.), New Jersey: Prentice Hall.

Horowitz H. (1987). Campus life: Undergraduate cultures from the end of the eighteenth century to the present. Chicago: The University of Chicago Press.

Hoyle J. (1995). Leadership and futuring: Making visions happen. Thousand Oaks, CA: Corwin Press.

Hyman L. (1975). Phonology: Theory analysis. New York: Holt, Rinehart, and Winston.

Hymes D. (1974). Foundations in sociolinguistics. Philadelphia, PA: University of Pennsylvania Press.

Infeld L. (1950) Albert Einstein: His work and influence on our world. NY: Charles Scirbner's Sons.

Janis I. (1973). Victims of groupthink: a psychological study of foreign policy decisions and fiascos. Boston: Houghton Mifflin.

Justiz M. (1994). Demographic trends and the challenges to American higher education, (pp. 1-21). In Manuel J. Justiz, Reginald Wilson, and Lars G. Bjork, (eds.), Minorities in higher education. Phoenix, AZ.: The Oryx Press.

Justiz M., Wilson R., & Bjork L., (Eds.), (1994). Minorities in higher education. Phoenix, AZ.: The Oryx Press.

Kahne J. (1996). Reframing educational policy: Democracy, community, and the individual. New York: The College Teachers Press.

Kane T., Tremble Jr., & Trueman, R. (2000). Transformational leadership effects at different levels of the army. Military Psychology, (pp. 24-28), (12)2.

Kegley C., & Raymond G. (2002). From war to peace: Fateful decisions in international politics. N Y: Bedford / St. Martin.

Kellner D. (2000) New technologies/new literacies: Reconstructing education for the new millennium. Teaching Education, 11(3), 245-263.

Kelman S. (1987). Public choice and public spirit. In Public Interest, (87), 81-92.

Kerr C. (1995). The uses of the university. (4th ed.), Cambridge: Harvard University Press.

Kimmel M., & Stephen C. (1998). Social and political theory: Classical readings. Boston: Allyn and Bacon.

Kincaid H. (1994). Defending laws in the social sciences. In Michael Martin & Lee C. McIntyre (eds.), Readings in the philosophy of social science, (pp. 111-130), London: The MIT Press.

Kingdon J. (1995). Agendas, alternatives, and public policies. (2nd ed.), NY: HarperCollinsCollege Publishers.

Kress G. (1985). Linguistic processes in socio-cultural practice. Victoria: Deakin University Press.

Kroth M., & Boverie P. (2000). "Life mission and adult learning." Adult Education Quarterly, 50(2), 134-149.

Kuhn T. (1970). The structure of scientific revolutions. Chicago, IL.: University of Michigan Press.

Kuran T. (1998). Insincere deliberation and democratic failure. Critical Review, (12)4, (pp. 529-545).

Kuran T. (1995). Private truths, public lies: The social consequences of preference falsification. Boston, MA.: Harvard University Press.

Lakoff J., & Johnson M. (1980). Metaphors we live by. Chicago: University of Chicago Press.

Laurillard D. (1997). Rethinking university teaching: A framework for the effective use of educational technology. London: Routledge.

Lee D. (2000). The society of society: The grand finale of Niklas Luhmann. Sociological Theory. 18(2), 320-330.

Leech G. (1983). Principles of pragmatics. London: Longman.

Leech G. (1981). <u>Semantics: The study of meaning,</u> (2nd ed.). Harmondsworth: Penguin.

Lehere A. (1974). <u>Semantic fields and lexical structure.</u> Amsterdam: North-Holland.

Lehmann W. (1992). <u>Historical linguistics,</u> (3rd ed.), London: Routledge.

Lepschy G. (1982). <u>A survey of structural linguistics.</u> London: Andre Deutch.

Lewis D., & Maruna S. (1996). "The politics of education." (pp. 438-477). In Virginal Gray, and Herbert Jacob, (eds.), <u>Politics in the American states: A comparative analysis.</u> Washington, D.C.: CQ Press.

Lincoln Y. (1994). Images for leadership: Enlarging the possibilities for diversity. In Burdin J.R., Hoyle, (eds.), <u>Leadership and diversity in education,</u> (pp. 11-18). Lancaster, England: Technomic.

Lucas C. (1994). <u>American higher education: A history.</u> New York: St. Martin's Griffin.

Luhmann N. (1995). Communication as systemic information processing: Niklas Luhmann's systems theory. In Richard Munch (eds..), <u>Sociological theory: From the 1850's to the present.</u> (pp. 271-306). Chicago, IL.: Nelson-Hall.

Luhmann N. (1990). <u>Essays on self-reference.</u> NY: Columbia University Press.

Mais R. (2000). Effects of transformational leadership on subordinate motivation, empowering norms, and organizational productivity. <u>International journal of organizational analysis.</u> (8)1, 32-40.

Mallmkjar K. (2001). (Eds.), <u>The linguistics encyclopedia.</u> London: Routledge.

Marconis J. (1999). <u>Sociology.</u> 7th ed.. NJ: Prentice Hall.

Marion R. (1999). <u>The edge of organization: Chaos and complexity theories of formal social systems.</u> London: Sage Publications.

Marshall C., & Rossman G. (1999). <u>Designing qualitative research,</u> (3rd ed.). London: Sage Publications.

Martin J., & Frost P. (1999). The organizational culture war games: A struggle for intellectual dominance. (pp 345- 367). In Stewart R. Clegg and Cynthia Hardy (eds.), <u>Studying organization: Theory & method.</u> London: Sage Publications.

Martin M. (1994). Another look at the doctrine of Verstehen. (pp. 259-280). In Michael Martin and Lee. C. McIntyre (eds,). Readings in the philosophy of social science. London: The MIT Press.

Martin M., & McIntyre. L. (Eds), (1994). Readings in the philosophy of social science. London: The MIT Press.

Matthew P. (1991). Morphology, (2nd ed.). Cambridge: Cambridge University Press.

Matthew P. (1972). Inflectional morphology. Cambridge: Cambridge University Press.

Maxcy S. (1991). Educational leadership: A critical pragmatic perspective. New York: Bergin & Garvey.

McKenna G., & Feingold S. (2003). Talking sides: Clashing views on controversial political issues. (13th ed.). Connecticut: McGraw-Hill.

McNeil J. (1996). Curriculum: A comprehensive introduction. Los Angeles: Harper-CollinsCollege Publishers.

Meier K., & Bohte J. (2000). Ode to Luther Gulick: Span of control and organizational performance. Administration & Society, (32)2, 115-137.

Miller S., Hickson D., & Wilson D. (1999). Decision-making in organizations. (pp. 43-62). In Stewart R. Clegg, Cynthia Hardy, and Walter R. Nord (eds.), Managing organizations: Current issues. London: Sage Publications.

Miller T., & Fox C. (2001). The epistemic community. Administration & Society.32(6), 668-685.

Milroy L. (1987). Observations and analyzing natural language. Oxford: Blackwell.

Milroy L. (1980). Language and social networks. Oxford: Blackwell.

Moskos C. (2001). What ails the all-volunteer force: An institutional perspective. Parameters; Carlisle Barracks; Summer.

Münch R. (Ed), (1995). Sociological theory: From the 1850's to the present. Chicago, IL.: Nelson-Hall.

Nagel E. (1994). The value-oriented bias in social inquiry. (pp. 571-584). In Michael Martin and Lee. C. McIntyre (eds,). Readings in the philosophy of social science. London: The MIT Press.

Newman F. (1994). An optimistic sense of possibility. (pp. 347-364). In Manuel J. Justiz, Reginald Wilson, and Lars G. Bjork, (Eds.), <u>Minorities in higher education</u>. Phoenix, AZ.: The Oryx Press.

Northouse P. (2001). <u>Leadership: Theory and practice</u>, (2nd). London: Sage Publications.

O'Banion T. (1997). <u>A learning college for the 21st century</u>. Phoenix, AZ.: The Oryx Press.

O'Grady W., Dobrovolsky M., & Aronoff M. (1993). <u>Contemporary Linguistics: An introduction</u>. (2nd ed.), NY: St. Martin's Press.

Ortony A. (1979). (Ed.), <u>Metaphor and thought</u>. Cambridge: Cambridge University Press.

Owens R. (2000). <u>Organizational behavior in education: Instructional leadership and school reform</u>. Boston: Allyn and Bacon.

Palmer F. (1986). <u>Mood and modality</u>. Cambridge: Cambridge University Press.

Pareto, V. (1995). The dynamics of power systems. (pp 77-93). In Richard Münch (ed.), <u>Sociological theory: From the 1850's to the present</u>. (pp. 271-306). Chicago, IL.: Nelson-Hall.

Payne N. (1994). Maintaining the competitive tradition. (pp.210- 238). In Manuel J. Justiz, Reginald Wilson, and Lars G. Bjork, (Eds.), <u>Minorities in higher education</u>. Phoenix, AZ.: The Oryx Press.

Peters T., & Waterman R. (1982). In search of excellence: Simultaneous loose-tight properties. (pp. 508-512). In Jay M. Shafritz and J. Steven Ott, (eds.), (1996) <u>Classics of organizational theory</u> (4th ed.). London: Harbrace Brace College Publishers.

Popkin R. (1999). <u>Columbia history of western philosophy</u>. NY: MJF Books.

Popper K. (1992). <u>The logic of scientific discovery</u>. London: Routledge.

Putman L., Phillips N., & Chapman P. (1999). Metaphors of communication and organization. (pp. 125-158). In Stewart R. Clegg, Cynthia Hardy, and Walter R. Nord (eds.), <u>Managing organizations: Current issues</u>. London: Sage Publications.

Rai K., Walsh D., & Best P. (1997). <u>American in the 21st century: Challenges and opportunities in domestic politics</u>. New Jersey: Prentice-Hall.

Rainey H. (2001). A reflection on Herbert Simon: A satisfying search for significance. <u>Administration & society, (33)</u>5, 491-507.

Reed R., & Johnson J. (2000). Philosophical documents in education. (2nd ed.), NY: Longman.

Reinhartz J., & Beach D. (1992). Secondary education: Focus on curriculum. NY: HarperCollins.

Resta P. (1994). Minorities and the new information technologies: Barriers and opportunities. (pp. 64-77). In Manuel J. Justiz, Reginald Wilson, and Lars G. Bjork, (eds.), Minorities in higher education. Phoenix, AZ.: The Oryx Press.

Richardson M., Blackburn R., Ruhl-Smith C., & Haynes J. (1997). The pursuit of continuous improvement in educational organizations. N Y: University Press of America.

Roberts J. (1995). The Penguin history of the world, (3rd ed.). London: Penguin

Rogers E. (1995). Diffusion of innovations, (4th ed.). NY: The Free Press.

Romaine S. (1988). Pidgin and Creole linguistics. London: Longman.

Rorty R. (1991). From objectivity, relativism, and truth: Postmodern bourgeois liberalism. (pp. 281-285). In Ronald F. Reed and Tony W. Johnson (eds.), (2000), Philosophical documents in education. New York: Longman.

Rown J., Scherer D., & Dallan J. (2001). Educational changes in the transforming army. Engineer.(31)2, 42-49.

Rudinow J., & Berry V. (1999). Invitation to critical thinking, (4th ed.). NY: Harcourt Brace College Publishers.

Rudolph F. (1962). The American college and university: A history. Athens, GA: The University of Georgia Press.

Rutgers M. (2001). "Splitting the universe: On the relevance of dichotomies for the study of public administration. Administration & Society. (pp. 3-20), (33)1.

Sacks H., Schegloff E. & Jefferson G. (1974). A simplest systematics for the organization or turn-taking in conversation. (pp. 696-735), Language, (50).

Saville-Troike M. (1989). The ethnography of communication: An introduction. (2nd ed.), Oxford: Blackwell.

Schaefer R, & Lamm R. (1995). Sociology. NY: McGraw-Hill, Inc.

Searle J. (1971). What is a speech act. In J.R. Searle, (Eds.), The philosophy of language, (pp.39-54). Oxford: Oxford Press.

Senge P. (1990). The fifth discipline: A shift in mind. (pp.513-537). In Jay M. Shafritz and J. Steven Ott, (eds.), (1996) Classics of organizational theory (4th ed.). London: Harbrace Brace College Publishers.

Shapiro R. (1998). Public opinion, elites, and democracy. Critical Review: An interdisciplinary Journal of politics and society. (pp. 501-529), (12)4.

Sheldon H. (2001). Professional education: The key to transformation. Parameters, (31)3, 4-16.

Shoshana Z. (1996). In the age of the smart machine: The limits of hierarchy in an informed organization. (pp. 547-560). In Jay M. Shafritz and J. Steven Ott, (eds.), Classics of organizational theory. (4th ed.). London: Harbrace Brace College Publishers.

Slattery P. (1995). Curriculum development in the postmodern era. NY: Garland Publishing.

Slobin D. (1979). Psycholinguistics. (2nd ed.), Glenview, IL: Scott Foresman.

Smyth J. (1989). (Ed.), Critical perspectives on educational leadership. NY: The Falmer Press.

Snider D., Priest R., & Lewis F. (2001). The civilian-military gap and professional military education at the precommissioning level. Armed Forces and Society, (27)2, 249-272.

Soeters J., & Recht R. (1998). Culture and discipline in military academies: A international comparison. Journal of Political & Military Sociology, (26)2, 169-181.

Stambler L. (1998). American education on the threshold of the twenty-first century. (pp. 82-115). In Rai, K., Walsh, D. & Best, J., (ed.), (1998). America in the 21st century: Challenges and opportunities in domestic politics. N.J: Prentice Hall.

Stampe D. (1980). A dissertation on natural phonology. NY: Gardland.

Stever J. (1999). The glass firewall between military and civil administration. Administration & Society. (31)1, 28-49.

Stoessinger J. (2001). Why nations go to war. Boston: Bedford/St. Martin's.

Strauss A. (1978). Negotiations: Varieties, contexts, processes and social order. San Francisco: Jossey-Bass.

Tannen D. (1990). You just don't understand: Women and men in conversation. NY: Ballantine.

Theodoulou S. (1995). How public policy is made. (86-95). In Theodoulou, S., and Cahn, M., (eds.), Public policy: The essential readings.

Tishman,S., Perkins D., & Jay E. (1995). The thinking classroom: Learning and teaching in a culture of thinking. Boston: Allyn and Beacon.

Tomlin R. (1986). Basic word order: Functional principles. London: Croom Helm.

Trow M. (1989). American higher education: Past, present, and future. (pp. 571-586). In Lester F. Goodchild and Harold S. Wechsler (eds.), The history of higher education (2nd ed.). Needham Heights, MA: Simon & Schuster.

Trudgill, P. (1984). Sociolinguistics: An introduction, (2nd ed.). London: Penguin.

Turner J. (1986). The structure of sociological theory. Chicago, IL.: Dorsy.

U.S. Army Education website: http://www.armyeducation. Army.mil/Vision_Mission.html. (2003).

Valadez J. (2000). Searching for a path out of poverty: Exploring the achievement ideology of a rural community college. Adult Education Quarterly, 50(3), 212-230.

Vine P. (1989). The social function of eighteenth century higher education. (pp. 115-124). In Lester F. Goodchild and Harold S. Wechsler (eds.), The history of higher education (2nd ed.). Needham Heights, MA: Simon & Schuster.

Waite D. (1995). Teacher resistance in a supervision conference. (pp. 70-86). In David Corson (Eds.), Discourse and power in educational organizations. New Jersey: Hampton Press.

Wardhaugh R. (1992). An introduction to sociolinguistics. Cambridge, MA: Blackwell.

Wasserman S., & Faust K. (1999). Social network analysis: Methods and applications. London: Cambridge University Press.

Watson R. (1971) The great psychologists, (3rd ed). NY: J.B. Lippincott Company.

Wechsler H., & Goodchild L. (Eds.), (1989). The history of higher education, (2nd ed.). Needham Heights, MA: Simon & Schuster.

Weick K. (1996). Technology as equivoque: Sense making in new technologies. (pp. 561-577). In Jay M. Shafritz and J. Steven Ott, (eds.) Classics of organizational theory (4th ed.). London: Harbrace Brace College Publishers.

Weick, K. (1991). Educational organizations as loosely coupled systems. (p.p. 103-117). In M. Peterson, E., Chaffee, and T. White, (eds.). Organization and governance in higher education. MA: Person Custom Publishers.

Weimer D., & Vining A. (1999). Policy Analysis: Concepts and practice. (3rd ed.), N J: Prentice Hall.

West C. (1984). Routine complications: Troubles in talk between doctors and patients. Bloomington: Indiana University Press.

Wierzbicka A. (1985). Lexicography and conceptual analysis. Ann Arbor, MI: Karoma.

Wittgenstein L. (1969). On Certainty. Oxford: Blackwell.

Wittgenstein L. (1922). Tractatus logico-philsophicus. London: Routledge and Kegan Paul.

Wolfram W. (1991). Dialects and American Englins. Englewood Cliffs, NJ: Prentice Hall.

Worthen B., Sanders R., & Fitzpatrick F. (1997). Program evaluation: Alternative approaches and practical guidelines. (2nd ed.). NY: Longman.

APPENDICES

APPENDIX A

INTERVIEW QUESTIONS

Georgia Southern University
IRB: Question Attachments

Gerald Allen Kehr
Department of Leadership, Technology, and Human Development

Question 1. Statement of Problem

The present research is dedicated to uncovering levels of
ambiguity associated with the linguistic stylistic of metaphor
between sociolects. The sociolects under investigation will center
on officer and senior enlisted cadre within the U.S. Army. The
study will explore metaphors officer and senior enlisted personnel
use to describe both higher education in general, and their
perceptions of the usefulness of higher education as a component
for professional development for lower enlisted personnel relative
to the overall Army mission. The present research will also explore
if there exists differences in metaphor interpretation between
officer and senior enlisted cadre.

Question 2. Research Design

The present research is a qualitative, in depth (sociolinguistic,
discursive analysis) interview study that will include two tiers of
interviews. The first tier will determine intra-sociolect metaphor
usage. The second tier will allow inter-sociolect perceptions of
metaphor perceived meaning.

Subjects will be selected via a non-random, convenience, quota
sample. Subject pool will represent both male and female genders.
The researcher has confirmed interview permission with
appropriate Fort Gordon officials. A list of officers and senior
enlisted personnel that to date are willing to participate in the study
has been assembled. One of the pre-selection conditions is that
participants represent a spectrum of officer and senior enlisted
personnel that total a sample of five officers and fifteen senior
enlisted personnel. Senior enlisted cadre is considered E-6 and
above. A second pre-selection condition is that participants are
familiar with the Army Continuing Education System (ACES).
Respondent anonymity will be established and maintained by
numerically coding all interviews; officers will be designate

numbers one through five and senior enlisted personnel will be designated six through eleven.

No follow up study of participants will be conducted.

The primary issue being investigated is the possibility of miscommunication via metaphor between officer and senior enlisted sociolects regarding the applicability of higher education for lower ranking enlisted personnel relative to the overall Army mission. Participates will be encouraged to discuss their perceptions of higher education relative to lower enlisted personnel and the development of critical thinking skills as a result of engaging participation in the Army Continuing Education System (ACES).

Participant interviews will be audio taped and transcribed. A content analysis to cull out metaphors used by participants will be conducted. Participants will not be identified at any time during the research process; and instead, will be given numbers for identification. Researcher foresees no risk of being identified during or after the interview procedure

Question 3. Risk To Human Subjects

The researcher does not foresee any risk (emotional, physical, or professional) to study participants.

Question 4. Benefits to Subjects and Society

The present research is intended to provide insight into how the U.S. Army may better infuse its higher education professional development program to lower ranking enlisted personnel. Few human endeavors a more dangerous, or more information dependent as warfare. Present technological advances have imposed demands on frontline enlisted combatant that involve an ability to cope with interactive, command control technology that requires a higher level of critical thinking skills than ever demanded of military personnel in human history. It is imperative that senior enlisted personnel who presently act as change agents for the ACES program have a higher level of consensus, and a more positive perspective toward the Army ACES program

so they are able to better serve base-level officer cadres who are chartered to fulfill the mandate of the Department of the Army.

To accomplish this objective the present research will determine the disparity (if any) that exists between how officer and senior enlisted personnel perceive higher education and its role in the development of providing lower enlisted personnel with greater critical thinking skill capability as well as increased technical skills required to operate advanced warfare technology.

It is the researcher's belief that increased military threats, both immediately impending and in the foreseeable future, will require an educated military imbued with skills to function within a high-tech warfare environment; these skills will include the ability to process and disseminate on sight battlefield information. Taken together, these skills require an education beyond the present high school standard. In addition, in is important to recognize that many lower ranking enlisted personnel are drawn from socio-economic and educationally marginalized segments of America's diverse population. The present effort on the part of the U.S Army to provide opportunities to attain a   higher education for lower ranking enlisted personnel will serve to protect and serve America militarily, but will also facilitate the democratization of higher education. This research intends to provide information that will help facilitate these objectives.

The present research is also intended to provide subjects with insight into the complexities of human communication. During the debriefing phase the researcher intends to point out how miscommunication can occur as a result of communication ambiguity (words and phrases do not always have universal meaning). The researcher will review the possible source of potential misunderstanding between officer and senior enlisted personnel. It is hoped that this research will give respondents an opportunity to reflect on the potential unintended outcomes of their interpersonal communication, regarding not only the ACES program but in all aspects of their lives as well.

Question 5. Participants are U.S. Army military personnel and their names and other personnel identification will be available for verification to the university under separate cover upon request for

validity or other purposes. In no way will respondent identification (name, rank, etc.) be linked to either the audiotape or written transcription.

During the analysis and post analysis phases, the individual audiotapes and individual written transcriptions will be stored in the researcher's personal bank safety deposit box located at the BB & T branch in Statesboro, Georgia. The researcher's wife, Heather Forsyth Kehr, will transcribe audiotapes. Only the researcher and Mrs. Heather Kehr will have access to the tapes and the transcriptions. Once the tapes are transcribed each respondent will be offered a copy of their audiotape only and a copy of the written transcription derived from that their personal audiotape. The audiotape and transcriptions distribution phase to those respondents who wish to obtain copies of their individual interview will take place approximately two months after the completion of the final interview.

All respondent-specific tapes and transcriptions not taken into possession by respondents will be destroyed. The destruction procedure will be as follows: (a) each individual audiotape will be unraveled, and all magnetic tapes will be machine-shredded; and, (b) all written transcriptions will be machine shredded as well.

Destruction of all tapes and transcriptions not claimed by individual respondents will take place in the presence of members of either the staff or faculty of the Department of Leadership, Technology, and Human Development, College of Education, Georgia Southern University. This destruction procedure will take place approximately eight weeks after the last respondent interview.

Question 6. Interview Protocols and Informed Consent Form are attached.

Question 7. All participants will be provided a copy of the Informed Consent Form to review and sign at the time of the interview. There is no subject. deception component incorporated into the present research. As a courtesy all participants will be given an opportunity to obtain an overview of the general results of the research approximately two months after the study. This time

period is considered the approximate time anticipated for data analysis.

Question 8. No minors will participate as subjects in the present research.

Tier One Interview Protocol

Officer respondents:

In general terms, how would you describe the ACES program to senior enlisted personnel?
What do you think would be the benefits of the ACES program for lower ranking personnel regarding their performance on the battlefield?

Senior enlisted respondents:

In general terms, how would you describe the ACES program to an officer? What do you think would be the benefits of the ACES program for lower ranking personnel regarding their performance on the battlefield?

Tier Two Interview Protocol

Drawing from same respondent populations of officer and senior enlisted cadre, each respondent will be asked how they interpret a selection of transcribed (not audio) metaphors obtained from the first tier interviews. The list will include metaphors from both officer and senior enlisted cadre populations. To ensure subject anonymity all metaphor transcriptions will be numbered. None of the transcribed metaphors will include references regarding either subject name or designation that they were obtained from either officer or senior enlisted personnel.

Post Interview Follow up

Respondents will be informed that a summary of the research results will be forwarded to them in approximately eight weeks. All respondents will be offered a copy of their audiotape and the transcription derived from it. Respondents will have the

opportunity to meet with the researcher at either a location and time of mutual convenience, or to make contact by phone or email. Those respondents that do not wish to possess a copy of the audio tape and/or transcription will be informed that the audio tapes were unraveled and machine-shredded, and that the transcriptions derive from their audio tape was machine shredded also in the presence of witnesses. The respondents will be informed during the debriefing (in addition to the Consent Letter) that there will be no name, rank or other personal identification linked to either their audio tapes or transcriptions at any time.

APPENDIX B

INSTITUTIONAL REVIEW BOARD PERMISSIONS

To: Mr. Gerald Allen Kehr
              Department of Leadership, Technology, and Human Development

Cc: Dr. Michael D. Richardson
              Department of Leadership, Technology, and Human Development

From: Office of Research Services and Sponsored Programs
              Administrative Support Office for Research Oversight Committees (IACUC/IBC/IRB)

Date: August 7, 2003

Subject: Status of Application for Approval to Utilize Human Subjects in Research

After an expedited review of your proposed research project titled "The Infusion of Higher Education in the U.S. Army: A Sociolinguistic Study of an Organizational Information Dissemination Process," it appears that (1) the research subjects are at minimal risk, (2) appropriate safeguards are planned, and (3) the research activities involve only procedures which are allowable under the following research category:

Collection of data from voice, video, digital, or image recording made for research purposes.

Therefore, as authorized in the Federal Policy for the Protection of Human Subjects (45 CFR §46.110), I am pleased to notify you that the Institutional Review Board has approved your proposed research.

This IRB approval is in effect for one year from the date of this letter. If at the end of that time, there have been no changes to the expedited research protocol, you may request an extension of the approval period for an additional year. In the interim, please provide the IRB with any information concerning any significant adverse event, whether or not it is believed to be related to the study, within five working days of the event. In addition, if a change or modification of the approved methodology becomes necessary, you must notify the IRB Coordinator prior to initiating any such changes or modifications. At that time, an amended application for IRB approval may be submitted. Upon completion of your data collection, please notify the IRB Coordinator so that your file may be closed.

C: Dr. Tom Case, IRB Chairperson
        Dr. Bryan Riemann, IRB Associate Chairperson
        Ms. Melanie Reddick, IRB Administrative Assistant

APPENDIX C

FORT GORDON PERMISSION LETTER

5 August 2003

Mr George R. Hilliard
Staff Supervisor Administrator
HQ 3297th US Army Hospital
Bldg 14401
Ft Gordon, GA 30905-5200

SUBJECT: Institutional Review Board.

As SSA, I have given Mr Gerald Kehr permission to utilize interview members of the 3297th US Army Hospital Army Reserves for a language usage study regarding the ACES and other education programs. This research was conducted during the month of Jul 2003 at our headquarters facility.

Mr Kehr provided me with a written agreement that stipulates that he will take precautions to protect the anonymity of the individuals involved, he is also assured me that he is keenly aware of the security nature of this information as it pertains to the affairs of the U.S. military.

As a result, Mr Kehr that after he has analyzed the information he has agreed to destroy all notes and audiotapes and other documentation such as names, rank, or specific military occupations disclosed while collecting data for his research. The procedures for destroying this material have been fully outlined by Mr Kehr and I have every confidence that he will honor his comment and provide me with documentation to verify that this procedure has been completed as specified.

Please feel free to contact me if you have additional questions or concerns.

Sincerely,

George R. Hilliard
Staff Supervisor Administrator

APPENDIX D

RESPONDENT PERMISSION/APPROVAL FORM

INSTITUTIONAL REVIEW BOARD (IRB)
Georgia Southern University
Informed Consent Letter

Dear Participant:

My name is Gerald Allen Kehr. I am conducting research as part of a doctorial program at Georgia Southern University. I am interested in finding out how members of the U.S. Army discuss the Army Continuing Education System program (ACES). My dissertation title is: The Infusion of Higher Education in the U.S. Army: A Sociolinguistic Study of an Organizational Information Dissemination Process.

This letter is to ask for your assistance in gathering information regarding your "everyday language" when you talk about the ACES program. Twenty people are being asked to participate in this study. They will represent members of the officer and senior enlisted cadre and will include both male and female respondents. All the respondents will be serving in either active or reserve army units. This study is meant to be nothing less than a positive contribution to our country and the military community. It is important that you fully understand that your personal identity will be held in strict confidence. I do not foresee any risk (emotional, physical, or professional) to the participants of this study. Please understand also, that your choice to participate, or not participate, in this study will not endanger your present or future military standing.

This study does not have a hidden agenda. This is a language usage study; it is **not** a _personal opinion_ survey. Nor is it some "IQ test." In no way is this study centered on you personally. Those of us who have served, or are presently serving, in the military know that the military has its own way of doing things, and it's own language. In the military setting people have a way of talking that is often different from the way civilians talk. Fact is, every profession has its own way of "talking," their own special language. You can see this in everything from bowling teams, golf buddies, even in the way some families have their own special way of asking, "Pass the salt." This study is looking at how the military talks about one of its programs. The program being used as a topic of discussion in this study is ACES.

The first objective of this study is to look at the words and phrases that are used in the military to describe the ACES program. The second objective is to look at the ways people in the military talk about how the ACES program relates to lower ranking enlisted personnel as a means to prepare them for a battlefield environment. The last objective is to help you gain some insight into how you communicate, and to better understand how the "everyday language" we often take for granted can have different meaning to different people and as a result be misinterpreted in ways we would have never imagined.

To accomplish these objectives you are being asked to participate in an audio taped interview that will take approximately one hour. We will agree to a mutually agreeable time and place for conducting the interview. During the taping you will be asked not to mention your name, rank or any other personal identifying information during the taping of the interview. Your interview will be given a numerical designation to ensure your anonymity. The taped interview will be transcribed in full and undergo a content analysis procedure. This will take approximately 8 weeks. A few weeks after your first interview session, you will be asked if you would like to read portions of the transcripts of other interviews. If you would like to participate in this phase of the study it will take about half an hour of your time. Again, we can meet in a location and at a time that is most convenient for you.

The objective of having you reading transcripts of other interviews (instead of listening to them) is to maintain respondent anonymity. Also, many of these transcriptions will be many pages long, and you will be asked to read only those brief sections that include ways people convey their ideas. We will look at metaphors for example and see how you interpret them. We will also look at some words and phrases and consider your interpretation of them. As I have mentioned, this is a very straight forward, "no tricks, no games" language use and interpretation study.

Upon completion of the study (approximately 8 weeks), you are welcome to have a copy of both your tape and written transcription. You will be encouraged to ask questions regarding this research. I look forward to sharing with you what we might discover from this research. You will also be provided a written summary of the research findings. I will gladly meet with you in person at a location of mutual convenience, or you are welcome to contact one another by phone or E-mail.

If you have any questions about this research project you are welcome to contact me by phone (912) 852-2049 or E-mail at kehrs@frontiernet.net. If you have any questions or concerns about your rights as a research participant in this study you are encouraged to contact the IRB Coordinator at the Office of Research Services and Sponsored Programs for Georgia Southern University at (912) 681-5465. Let me thank you in advance for your assistance in this study.

Gerald A. Kehr	Participant Acknowledgement:
Department of Leadership, Technology, and Human Development	
Georgia Southern University	_____
	Print Full Name
_____	_____
Signature	Signature
_____	_____
Date	Date