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An Analysis of the Utilization of Power by Florence Nightingale 1856-1872

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AN ANALYSIS OF THE UTILIZATION OF POWER
BY FLORENCE NIGHTINGALE 1856-1872

by
Louise C. Selanders

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AN ANALYSIS OF THE UTILIZATION OF POWER
BY FLORENCE NIGHTINGALE 1856-1872

Louise C. Selanders, Ed.D.
Western Michigan University, 1992

This historical analysis sought to determine the types of power utilized by Florence Nightingale while providing leadership to major reforms and how these power acts were implemented. The scope of the study was her productive post-Crimean years from 1856 through 1872. Events which were examined included the reform of the health of the British Army including the Royal Commission, the establishment of modern, secular nursing education and the establishment of public health standards in India during British colonization.

The power acts were examined relative to the constituents of power defined by Dahl (1957). The source of power contained subsets termed bases of power by French and Raven (1959) which were also examined relative to the power acts.

The findings of this study indicate that Florence Nightingale primarily employed expert power to implement change. Her expertise grew from her Crimean experience which impressed her with the need for hygienic reform, better medical education and purification systems and for organized nursing education. This culminated in the establishment of public health standards in India.

Coercion was also utilized. This came in the form of multiple threats of resignation and complaints about individual behavior to people in power.

Authority was more limited than influence as she tended to create change indirectly. This was partially the result of cultural expectations and the role of women in the nineteenth century.
This study has implications relative to leadership. Leadership encompasses a particular type of power relationship. Leadership, which draws on an understanding of power utilization, may promote transformational leadership.

Study implications for nursing include that, while Nightingale demonstrated power utilization, she was not able to empower other nurses. This continues to have a lasting impact on nursing's development.
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An analysis of the utilization of power by Florence Nightingale, 1856–1872

Selanders, Louise C., Ed.D.
Western Michigan University, 1992

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The completion of an academic degree and a dissertation requires the assistance and support of many individuals. In particular, I would like to thank my advisor and committee chair Dr. Robert Brinkerhoff and my committee, Dr. Patrick Jenlink and Dr. Andrea Bostrom, for their support, guidance and effort on my behalf.

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Louise C. Selanders
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CHAPTER I

THE PROBLEM

Power as a Force

Power is a dynamic force, both sought after and feared. While most people intuitively understand the concept, it remains elusive when specific definition is attempted. As described by Wigginton (1986), power is a "loaded word" (p. 193).

Power is pervasive in our lives. It exists in families, in schools, in the workplace, in church. Power is a force which may be exerted by an individual or collectively by groups or organizations, or more remotely, through a bureaucratic structure.

Power derives its strength from outcomes. Winston Churchill, Lee Iaccoca, the successful board of directors of a corporation, or the family who raises self-reliant children all have demonstrated the utilization of power. The same could be said for Hitler, Saddam Hussein or Attila the Hun. What separates these groups is the social acceptability of the outcome.

Others have attempted to use power, but have failed in goal achievement. Examples include John Brown at Harper's Ferry and Richard Nixon. The result of these attempts may be disgrace and a loss of social status.

The exertion of power demonstrates the relational nature of the concept. Regardless of who is involved in the power act, a relationship must exist between the power holder and the power recipient. Without this property, a specified action may simply be a random response to an unknown stimuli.
In an example offered by Dahl (1957), he states that if an individual standing beside a major freeway commanded that all drivers only drive in the right lane, it is unlikely that this would occur. However, if a police officer standing in the center of an intersection commanded people to drive in only the right hand lane, this probably would occur. The difference found in these two situations is relational power. Even though the people driving through the intersection might not know the police officer, his position and authority are recognized. This creates a relationship of power which was absent in the first example.

Kreisberg (1992) further posits that power is accumulated. Therefore, it is to be treated as a scarce resource. This has to do with wins and losses in power play situations. The more one has won in the past, the easier it may be for him to win in the future. Therefore, events may regulate access to power.

The president has more access to other world leaders than does the average American citizen. This comes from the power of the office as well as name recognition and previous interactions. By this standard, the power of a given President would grow over time. The danger in this situation, however, is that those who exert power may attempt to hoard it so that power may be used to one's own advantage.

The assumption and maintenance of power is culturally prescribed. In *Power: How to get it, how to use it*, Korda (1975) states that one must know how to use the "power game" to survive:

All life is a game of power. The object of the game is simple enough: to know what you want and get it. The moves of the game, by contrast, are infinite and complex, although they usually involve the manipulation of people and situations to your advantage (p. 4).

Korda further posits that it is culture that determines what moves in the power game are acceptable.
Power and the Individual: Florence Nightingale

When considering individuals who have exerted power in a significant manner, political leaders provide the most obvious example. Washington, Jefferson, Ghandi, Churchill, Hitler and Saddam Hussein each command images of power and the outcomes they produced. More subtle change is effected by social reformers. Often recognition for their achievements only comes after a generation or more has passed.

Florence Nightingale is best remembered for her accomplishments as they relate to nursing during and shortly after the Crimean War (1854-56). These include the reduction of soldier mortality from approximately 60% to 2% for those treated at the Barrack Hospital in Scutari (Goldie, 1986; P. Kalisch & B. Kalisch, 1986). Additionally, there was the establishment of general care standards such as one soldier per pallet, weekly baths, daily wound dressing and standardized meal patterns. It was these changes that caused her to be known as the "Lady with a Lamp" and inspired the writing of Santa Filomena by Henry Wadsworth Longfellow (P. Kalisch & B. Kalisch, 1986).

What is not so frequently recognized is the lasting social reform which she was able to effect. These include the establishment of The Nightingale School at St. Thomas' Hospital and the resulting standards for nursing education, the renovation of the Army Medical School, the establishment of medical statistics, and the development of public health standards for India (Cook, 1913; Huxley, 1975; Woodham-Smith, 1953).

Nightingale was unable to work in any official or elected capacity following her return from the Crimea because of her gender. In spite of this complication, the
study of Florence Nightingale reveals the successful use of power by an individual for the purpose of implementing change.

Purpose of the Study

Basic to this study was the assumption that Florence Nightingale was a powerful woman. This was demonstrated by the social change which she effected. The major purpose of this study was to determine the type(s) of power utilized by Nightingale and how this was implemented in order for her gain her objectives.

A second purpose of this study was to add to the literature which has extensively examined the events and circumstances of Nightingale's life. The current literature falls into three categories: that authored by Nightingale; major and minor biographies, some of which look at Nightingale from a hagiographic perspective; and accounts of specific events such as the time spent in the Crimea or the development of the Nightingale School. This study will attempt to augment the literature by examining Nightingale's actions during the immediate post-Crimean years from a conceptual perspective.

Burns (1978) posits that power and leadership are entwined in a relationship. Further, he states that if the nature of power can be understood, then the possibility exists that the nature of leadership can be understood. Therefore, by examining Nightingale's utilization of power, it is also possible to examine Nightingale's role as a leader and a social reformer.

Nightingale is the commonly recognized founder of modern Western secular nursing. While Nightingale appeared to be effective in power utilization, the nursing profession has been heavily criticized for its ineffective utilization of power.
Many reasons have been offered as to why nursing seems ineffective in its power relationships. Ashley (1977) states that nursing has been the victim of blatant sexism practiced by the primarily male physician and hospital administrator. Etzioni (1969) and Katz (1969) contend that nurses are of a lower status than true professionals and therefore should not have access to power.

Langford (1978) states that nursing is in a state of impotence. Impotence implies an absence of power. By examining Nightingale's utilization of power and the methods which she employed, it may be possible to begin to look at nursing's development and the profession's utilization of power.

Study Questions

The questions which this study sought to answer were:

1. What type of power utilization did Florence Nightingale demonstrate during the post-Crimean years of 1856-1872?

2. What was the lasting effect of Nightingale's utilization of power from 1856-1872?

Study Relevance

The general value of a historical study is to try to discover the truth about the past so that the present may be understood and the future molded. In this case, by examining the utilization of power by Nightingale, the ineffective power usage by nursing may be understood and future events molded in a such a way as to improve nursing's power position. This study also provided the opportunity to analyze a specific instance of power utilization.
The life and times of Nightingale have been extensively documented. However, this study offers a new perspective of Nightingale's accomplishments which may shed light on her abilities as a leader and how she affected British society as a social reformer.
CHAPTER II

REVIEW OF THE LITERATURE

Power is a phenomenon which pervades human relationships and determines the outcomes of social interactions. It encompasses the capacity to influence the behavior and attitudes of others in such a manner as to move them in a desired direction despite resistance. This process may occur in formalized or informal situations.

The purpose of this chapter is to examine the recent research as it relates to power and power utilization. Initially, the conceptual nature of power will be examined. Definitions of power and the measurement of power will be discussed. Works which demonstrate the relationship of power and leadership will be reviewed. In the final section, the writings related to Nightingale's utilization of power will be summarized.

Power as a Concept

Power has been described as a concept (Bowman & Culpepper, 1974; Dahl, 1957). In The Random House Dictionary of the English Language (Stein, 1967), concept is defined as, "a general notion or idea; an idea of something formed by mentally combining all characteristics of particulars; a construct" (p. 304). This is expanded by Torres (1990) who states, "concepts are words that describe objects, properties or events and are basic components of a theory" (p. 2). It is further elaborated by Fawcett (1984) who posits that concepts are highly abstract and general.
A more practical definition of concept is, "an abstraction from observed events: it is a word that represents the similarities or common aspects of objects or events that are otherwise quite different from one another" (Ary, Jacobs & Razavieh, 1985, p. 27). This is supported by King (1971) and Kerlinger (1986) who stress that a concept provides a generalization from particular perceptions formed from the surrounding environment.

This discussion indicates that if power is a concept, it then is an abstract phenomenon which is present in the environment. Further, the results of power utilization can be observed.

Bacharach and Lawler (1980) state that there are two types of concepts: primitive and derived. A derived term is at a low level of abstraction. Such a concept allows for relatively precise definition and concrete operationalization.

A primitive term is inherently vague and its main value is to stimulate interest in the development of the concept which may lead to the development of a more specific and a better defined idea of the phenomenon. Power is considered to be a primitive term.

Bacharach and Lawler (1980) describe power by form and content. Form is the basic pattern or configuration of the phenomenon. It will be present in any empirical instance of a power relationship. Examples of form would be characteristics of the concept such as the relational aspect, dependence and the ability to sanction.

Form is differentiated from the content of power which is the circumstantial aspect. Bacharach and Lawler (1980) see these as idiosyncratic and specific to a given power relationship. This includes the components of influence and authority. When the content of power arises from authority, subordinates acquiesce without
question. Therefore, they will act even if they do not agree with the superior (Yukl, 1989). However, this may vary from situation to situation.

This is also different from influence in which the participants do not suspend critical judgment (Bacharach & Lawler, 1980; Yukl, 1989). Action will occur on the basis of the participant's inclination. By comparison, influence is an indirect constituent of power where authority is direct.

Definitions of Power

Dahl (1957) states that a word for power can be found in most modern languages, indicating the prevalence of the concept. The origin of the word can be traced to the Middle English "poer" and the Latin "posse" meaning "to be able" (Hawks, 1991; Stein, 1967).

The study of the concept of power has been across academic lines. The phenomenon has been examined by political scientists, sociologists, economists and psychologists in an attempt to identify how power effects human interactions by individuals, in families and groups and by society.

Research related to the concept of power began to proliferate after the turn of the twentieth century. A 1931 definition by Tawney (Blau, 1964) states power is, "the capacity of an individual or group of individuals to modify the conduct of other individuals or groups in the manner which he desires and to prevent his own conduct being modified in the manner in which he does not" (p. 115).

The seminal work on power relationships was conducted by Max Weber (Gerth & Mills, 1946), who defines power as, "the probability that one actor within a social relationship will be in a position to carry out his own will despite resistance, and regardless of the basis on which that probability rests" (p. 180).
Dahl (1957) states, "A has power over B to the extent that he can get B to do something B would otherwise not do" (p. 203). While this is based on Weber's ideas, this definition clearly demonstrates a cause and effect relationship. There is no distinction between power and influence.

Blau (1964) uses social exchange theory to explain the concept. He defines power as, "the ability of persons or groups to impose their will on others despite resistance through deterrence either in the forms of withholding regularly supplied rewards or in the form of punishment, inasmuch as the former as well as the latter constitute, in effect, negative sanction" (p. 117).

This appears to be similar to Bierstedt (Bacharach & Lawler, 1980) who posits that power is inherently coercive and that it is the ability to apply sanctions. He defines power as, "a latent force. Power itself is the prior capacity which makes the application of force possible" (p. 17).

Burns (1978) defines power as a process in which:

- power holders (P), possessing certain motives and goals, have the capacity to secure changes in the behavior of a respondent (R), human or animal, and the environment, by utilizing resources in their power base, including factors of skill, relative to the targets of their power-wielding and necessary to secure such changes (p. 13).

This definition appears to be unique because of the scope which includes humans and non-human animals as well as the environment. It also specifies skill as a power base. Finally, it emphasizes the relative and situational nature of power.

In a mathematical statement, French and Raven (1959) posit that power is, "the maximum force which A can induce on B minus the maximum resisting force which B can mobilize in the opposite direction" (p.152). Mechanic (1962) has a simpler definition by stating, "power is defined as a force that results in behavior that would not have occurred if the force had not been present" (p. 351). Perhaps the
most concise definition is offered by Salancik and Pfeffer (1977) who state power is, "the ability to get things done the way one wants them to be done" (p. 4).

Debate arises as to whether or not power is only an actual phenomenon or whether it exists in potential form. Dahl (1957) states that unused potential is not power and that, conversely, power is the successful use of potential. Cartwright (1959) concurs in that he states that power is measured by the strength of an action.

Wrong (Bacharach & Lawler, 1980) makes a distinction between potential power and use of power. Only use of power is actual power.

Bierstedt (Bacharach & Lawler, 1980) takes the opposite approach, stating that power is the ability to apply sanctions. Therefore, even though the sanction may not be applied, the threat remains. Therefore, power exists as a potential. Nagel (1968) agrees with this approach, stating that a common sense understanding of the concept of power includes the anticipation of A's actions over B as well as the actual application of power of A over B.

The commonality found among all of these definitions is that some kind of relationship must exist between the power holder and the recipient of the power act. Without this property, a specified action may simply be a random response to an unknown stimuli.

Nagel (1968) clarifies this idea. He states that when A is thought to have power over B, it is not necessary for A to know B or for A to communicate directly with B; rather, it is required only that B make some inference about what B expects from the power relationship, even if that inference proves to be incorrect at a later date.

In an example given by Stimson and Bundy (Nagel, 1968), it was stated that Japan surrendered at the end of the Second World War because of its fear of
additional atomic bombing by the United States. This constituted a power relationship even though the United States had no more atomic weapons.

Dahl (1957) further expands the relationship issue of power by stating that a time lag, regardless of how small, must exist from the time one exerts power until the second responds to the power wielding. If a relationship did not exist, the result theoretically could occur before the act.

A second commonality offered in these definitions is that power is not considered to be a possession nor is it an inheritable or transferable attribute. Even in the case of royalty, the issue of power is one of office, not directly because of genetic blood lines. A son may become king automatically on his father's death. However, the power belongs to the office. Should the king abdicate, as in the case of Edward VIII in 1936, the power remained with his successor George VI.

Bacharach and Lawler (1980) identify two additional components of a power relationship. The first is dependence, which they believe exist in all power relationships. They state that power outcome is dependent not only on A's behavior (the instigator) but also on what others do either simultaneously and/or in response to A's behavior.

The second is the sanctioning aspect of power. These are the actual changes which the power holder can make on another's outcome. This is the active component of the power relationship and can be the manipulation of rewards, punishments or both.

Zey-Ferrell (1979), while not offering a separate definition of power, does state that two characteristics of a power relationship are that it is asymmetrical and situationally dependent. This indicates that the power holder exercises greater control over the power recipient than the reverse in any given situation. However, should the
situation change, the power recipient in one situation can become the power holder in another situation and thus hold the majority of the power.

Authority and influence are seen as sub-concepts of power by Bacharach and Lawler (1980). A comparison of these subconcepts was made using the parameters of source, flow, domain, submission and decision-making. When describing authority, the positional or structural characteristics are the source. The domain is delimited to the position and flow is in a unidirectional downward movement. Submission is involuntary and formal sanctions may be applied as the result of challenging the authority.

Influence, on the other hand, appears less rigid. It may be obtained through personal characteristics, expertise or opportunity. Its flow is multidirectional and has an ambiguous domain. Submission is voluntary, and, therefore, sanctions are informal.

In a concept analysis of power conducted by Hawks (1991), subconcepts of "power over" and "power to" are identified. Power over implies forcefulness while power to is associated with effectiveness. While authority appears to be associated specifically with the power over concept, power to may be associated with either authority or influence.

Similar subconcepts are also described by Kreisberg (1992). Power over is seen as the predominant concept of power while power with is the alternative understanding of the concept. Power with is seen as being equal to empowerment and therefore desirable. Kreisberg hypothesizes that through the application of transforming power-with techniques, social justice ultimately can be achieved.
The Measurement of Power

Power has been described as a concept. As such, it is an abstract phenomenon which cannot be directly observed. Consequently, power is seen as the outcome of the power act (Bacharach & Lawler, 1980; Dahl, 1957; Harsanyi, 1962a; Nagel, 1968). Dahl (1957) states that the problem with power is not to determine whether or not power exists, but rather to determine the extent of power. The ability to measure a concept is basic to conducting research on the concept.

To define the parameters of a power relationship, Dahl (1957) identifies the following constituents:

1. **Source** - the domain or base of power which includes economic resources and personal attributes.

2. **Means** - the instruments of power. This may imply sanctions.

3. **Amount** - the extent of power. Specifically, this refers to the net increase in the amount or probability of getting a specific action or outcome.

4. **Range** - the scope of resources or opportunities to implement the power relationship.

5. **Extension** - The set of individuals or groups over which the instigator has power.

Nagel (1968) has extended this list to include an additional component. This is:

6. **Cost of power** - The net loss to the individual or group because power has been exercised.

In each case, Dahl (1957) argues that the more of any of these constituents which is attributed to a specific power-wielding situation, the greater the power base. This is also supported by Harsanyi (1962a) who adds that a quantitative measurement
of power must also include not only the costs and but also the strength of the power base.

Zey-Ferrell (1979) has modified the sources of power to include position, knowledge, personal attributes and traditional values. She describes power as that which comes from inheritance rather than personal characteristics. Royalty is again used as the example in which legitimacy is granted to the position by subjects regardless of the performance of the individual.

French and Raven (1959) expanded the concept of source or base of power to include types. These have been identified as:

1. **Coercive power** - The threat of decreasing another's outcomes. This is related to the degree of known or expected sanctions.

2. **Reward power** - The promise of increasing another's outcomes. This is the psychological opposite of coercive power.

3. **Expert power** - Formal or specialized knowledge about issues or activities.

4. **Legitimate power** - The right to control with an obligation to obey. This may be equated to authority or positional power.

5. **Referent power** - Identification with another in which the target wants to gain the agent's approval.

A sixth category was later added by Raven and Kruglanski (1970). This is:

6. **Information power** - Knowledge about a specific event or action. This is not position dependent.

French and Raven (1959) have placed the first five power bases in a power taxonomy. When identifying the least subordinate satisfaction to the greatest subordinate satisfaction, the types of power would be ordered as reward, coercive, legitimate, expert, and referent. This would indicate that subordinates who are the
recipients of a power act would be more satisfied when the base of power which is utilized is referent and the least satisfied when the base utilized is reward.

Measurement of power according to these theorists, therefore, consists of the measurement of the constituents of the outcomes of the power act. While terminology appears to vary, the domain, the instruments, the extent, the scope and the group over which one may have power all appear to be necessary to determine the degree to which the power act will bring the desired behavior.

Several examples of measurement of power exist. In one instance, Dahl (1957) rank ordered United States Senators according to the degree of relative power held on the development of foreign and domestic tax policy. This was done in an attempt to demonstrate that it is possible to make comparisons as to the degree of power which is held by individuals related to a specific issue.

The measurement of power was conducted mathematically by determining the difference in the probability of an event when A (the power wielder) exercises a certain action as compared to the probability of an event when A does not exercise the action. In this manner, individuals or groups can be rank ordered provided that the subjects are determined to be comparable. The difficulty with this method is that only rarely is one able to make the kinds of observations which would render this method valuable.

In a second example, Harsanyi (1962a) argued that the crucial variable for measurement was the amount of power. By adding the additional dimension of opportunity costs (what it will cost A in order to exercise power over B), Harsanyi developed a different theoretical measure for determining the strength of power in a given situation using the theory of two-person bargaining games.
In a further publication, Harsanyi (1962b) states that distinctions must be made in measuring power relationships which are unilateral and those which are reciprocal or bilateral. He states that to adequately measure this type of power relationship, a separate mathematical model must be developed which will be able to predict all possible outcomes through measuring strength of bargaining position.

Yukl (1989) indicates that empirical studies in power contain serious methodological limitations. He states that the most serious limitation is the lack of demonstrated validity for measures of leader power. Most studies are conducted through the use of questionnaires which may be biased by whether or not the respondent is satisfied. Studies have shown that those who are satisfied as employees are more likely to attribute referent power to leaders than employees who are dissatisfied. This also tends to emphasize a second problem with power research in that studies tend to be conducted as they relate to "power over" subordinates as opposed to those who experience power in a lateral or upward flow.

Another limitation cited by Yukl (1989) is the inability to deal with confounding variables as they relate to determining a differentiation of power types. The power types appear to have a complex interrelationship which has not been examined.

Power and Leadership

Leadership has been defined as, "a particular type of power relationship characterized by a group member's perception that another group member has the right to prescribe behavior patterns for the former regarding his activity as a group member" (Janda, 1960, p. 358). This definition bears similarity to the previously
discussed definitions of power. The purpose of this section is to explore the relationship between power and leadership.

Janda (1960) provided an early attempt to interrelate these concepts. He also identified difficulties which he perceived exist in social research. Specifically, these include delusion of sufficiency and confusion by similarity.

Delusion of sufficiency occurs when terminology describing a specific concept is also used in everyday language. Janda suggests that this results in explanation of concepts which are consequently not analyzed in an exacting fashion and therefore does not allow in exacting study of the concept.

Confusion by similarity occurs when more than one distinct concept shares the same label. Even though each concept might be developed in a clear and distinct manner, confusion results when the individual differences in the concepts cannot be differentiated.

Janda (1960) maintains that the study of leadership suffers from both of these difficulties. This has resulted in ambiguity in the results of studies in leadership because it cannot be ascertained that the phenomena which are being studied are actually the same phenomena. He specifically identifies four difficulties observed in the study of the concept of leadership:

1. Little comparability exists among leadership studies in the aggregate because they do not concern themselves with a common phenomena.

2. Leadership research is frequently confused with the study of group process.

3. Leadership and headship have not been distinguished as separate concepts.
4. The study of leadership has been conducted as though it were a totally unique phenomenon as opposed to studying it relative to other basic concepts in social psychology.

Janda (1960) indicates that power and leadership have been studied in virtual isolation from one another. By establishing leadership as a special type of power relationship, the investigator is guided toward studying the basic relationship and roles which exist in groups.

Burns (1978) has provided the seminal work on leadership through the examination of the lives and actions of four twentieth century power holders. However, all do not qualify as leaders.

Burns (1978) defines leadership as occurring when, "persons with certain motives and purposes mobilize, in competition or conflict with others, institutional, political, psychological, and other resources so as to arouse, engage and satisfy the motives of followers" (p. 18). The major characteristic of this definition is the idea of mutuality which is not present in other definitions of power.

Burns states that leadership is inseparable from follower's needs and goals. He states that leadership is a special form of power just as leaders are special forms of power holders. The most poignant example of this relationship is the case of Hitler -- certainly a power-wielder, but not a leader.

Burns distinguishes between two forms of leadership. The first is transactional leadership which is characterized by an exchange of a valued thing. Each person within the relationship recognizes that the other has something which may be exchanged through a bargaining process. This form of leadership is not viewed as lasting or binding.
The preferred form of leadership according to Burns (1978) is transformational leadership. This occurs when leaders and followers are both moved to higher levels of motivation and morality. Burns sees this as being based in mutuality and ultimately resulting in moral leadership.

Leadership is said to arise in states of conflict (Burns, 1978). However, the conflict does not occur between the leader and the followers; rather, with others who exist in the environment. This allows the leader to mobilize resources and work to move the followers ahead with motivation and for a common goal.

Bennis and Nanus (1985) also describe a relationship between the concepts of power and leadership. They state that leadership is the wise use of power. Ultimately the wise use of power leads to empowerment of the followers.

Nightingale and Power

Relatively little has been specifically written about Nightingale and her use of power. The most extensive work relative to the study of Nightingale and her utilization of power was published by F. B. Smith in 1982. He states that his intent is to use material unavailable to previous biographers and determine why and how she assumed the role of social reformer.

Smith is critical of Nightingale's earlier biographers whom he sees as painting Nightingale in a hagiographic light. He appears to go to the other end of the continuum in identifying Nightingale's motives in her demonstration of power as entirely self-serving. The tone for the book is set with the first sentence when he states, "Florence Nightingale's first chance to deploy her talent for manipulation came in August 1853" (p. 11).
While Smith does support the fact that Nightingale was skilled in the use of power, he tends to present her as occasionally mentally unbalanced and a religious zealot. The conclusions at which Smith arrives are not supported by other authors who have examined much of the same evidence for nearly a century.

Several other works have attempted to identify Nightingale's utilization of power. Nauright (1984) speaks to Nightingale's ability to work within the male power structure. This is reflected by Nightingale's close relationships with Sidney Herbert and her most devoted male friend, Dr. John Sutherland, who was appointed Head of the Sanitary Commission. Each of these allowed Nightingale to press for reform without being an actual part of the male-dominated political structure of nineteenth century England.

Longevity is in itself considered to be a form of power (Zey-Ferrell, 1979). Several studies attest to the longevity and continuing usefulness of Nightingale's concepts as they relate to practice in the twentieth century.

Dennis and Prescott (1985) utilized qualitative research data to provide support for Nightingale's concepts which are currently utilized in modern nursing practice. These are based on the original thirteen canons found in Notes on Nursing: What it is and is not (Nightingale, 1859). A further effort has been made by Muriel Skeet (1980) in which she adapted the concepts found in Notes on Nursing and applied them to current practice standards.

In a related topic, Henry, Woods and Nagelkerk (1990) described Nightingale's skill in nursing administration. The bulk of Nightingale's employment experiences were administrative in nature. They describe the characteristics which Nightingale felt an administrator should bring to a position. They include education, decisiveness, discipline, and a sense of humor. The authors describe that the
utilization of these characteristics by Nightingale helped her to achieve her goals. Further, she expected others around her to display the same characteristics. These skills are essentially consistent with those reported as necessary for nursing administrators in the twentieth century by Mark, Turner and Englebardt (1990).

Inferences about her use of power can be derived from her biographies, her personal publications, and books which examine specific events in Nightingale's life. The value of such volumes is the sequencing of events in Nightingale's life. From these, one can begin to infer power wielding and motivation.

Two major biographies of Nightingale's life have been written. The first, a two-volume effort by Cook (1913), was published only three years after Nightingale's death in 1910 and remains the seminal account of her life events. The second, by Woodham-Smith (1953), while heavily based on the original biographical work, was produced after the author had access to new papers and letters not available to Cook.

Secondary biographies include Huxley (1975), notable for the complete photographic representations presented in the volume, and O'Malley (1934). Each of these was developed from primary documents and helps to provide factual triangulation and substantiation of events.

Nightingale's own publications provide the most in-depth insight into her motivations and values. Notes on nursing: What it is and is not, published in 1859 and Nightingale's best known volume, offers the most concise and complete view of nursing. However, of more benefit to the understanding and development of Nightingale's utilization of power are her lesser known works such as Notes on matters affecting the health, efficiency and hospital administration of the British Army (1857), Subsidiary notes as to the introduction of female nursing into military hospitals (1858), Notes on hospitals (1863), and Suggestions for a system of nursing
for hospitals in India (1965). These established Nightingale as an expert in the areas of hygiene, sanitation and health statistics.

More recent volumes have examined in-depth specific events in Nightingale's life. These include Cope's (1958) *Florence Nightingale and the doctors* and Baly's (1988) *Florence Nightingale and the nursing legacy*. These detail relationships and how Nightingale used her expertise during her productive years.

Conclusions

Power is a pervasive concept in the lives of human beings. The effects of power have been seen through conflicts among peoples and socio-political struggles which have changed the course of history.

Early studies of power were descriptive and attempted to define its nature and parameters. Later studies attempted to measure power. However, the difficulty remains in attempting to obtain a set standard against which the quantitative measurement can be made.

Nightingale did not directly address in any of her publications how she perceived the concept of power. However, she was able to demonstrate its use through her areas of expertise and as a social reformer.

Biographies about the life of Nightingale and publications detailing life events are useful in that they provide detail, cultural context and author interpretation of events. Resources which have employed similar primary literature for research are able to provide triangulation as substantiation of events.

An examination of the research and associated writings relative to power and Nightingale provides the basis for the definition of this study. Sufficient data exists to establish the parameters for measuring Nightingale's utilization of power.
This review has also revealed that this study will be able to add to the existing research as it relates to Nightingale and to power and leadership. It also indicates that further studies as related to power utilization and Nightingale's era are warranted.
CHAPTER III

METHODOLOGY

The purpose of this study was to examine how Florence Nightingale used power during the years of 1856-1872. The nature of the data required the utilization of historiographical methods. This chapter describes the criteria used in data selection, methods of data sorting, concept selection and methods of data analysis. Study limitations are also examined.

Historical research attempts to establish facts about events which have occurred in the past through the interpretation of weighted evidence (Kerlinger, 1986). In this manner, the origins of a discipline may be established and context is applied to a specific event or problem.

The events selected for this study encompassed the life of Florence Nightingale after her Crimean experience beginning in 1856 through the completion of her active contributions to the development of the Nightingale School in London in 1872. Her methods and motivations in achieving her goals can only be determined through systematic examination of the remaining primary and secondary evidence.

Scope of the Study

The study of Florence Nightingale revealed that her life could be readily partitioned into chronological sections as described by her biographers Cook (1913), Huxley, (1975) and Woodham-Smith (1953). These include the following:

1820 - 1836: Formative Years. These years were marked by formalized education which emphasized languages, mathematics, and classic literature. Travel
added to her scope of the world view. Family discord, especially with her mother, and a sense of competitiveness with her sister caused Nightingale to withdraw within herself and to begin to seek solace outside of the home environment (Pickering, 1974).

1837 - 1852: Goal Formation. On February 7, 1837, Florence Nightingale described in her diary a religious experience in which she stated that she had spoken with God. This caused her to formalize her purpose in life as being to in some way serve a higher Being. It was not until at least 1844 that she recognized that the form of this service should be nursing. During this period, she also spent an extended period in Europe, meeting many of the contemporary intellectuals and social reformers. In 1850 and 1851, Nightingale visited Kaiserswerth in Germany and received her only formalized nursing training.

1853 - 1856 (July): Employment Years. In August 1853, Nightingale assumed an unpaid position as the Superintendent of the Hospital for Sick Gentlewomen in Distressed Circumstances. Her success at this institution caused her to be noticed by Sir Sidney Herbert, the Secretary for War. As the need arose for nurses to be taken to the Crimean front, she was sought out by Herbert to be the group's leader. As a result, Nightingale spent a twenty-one month period in Turkey as Superintendent of the English nurses.

This three-year period represents the only time actually employed in nursing. However, many of her duties were administrative and organizational in nature as opposed to actually spending this period at the bedside.

Her first major bout of illness came as a result of "Crimean Fever" came in 1855 (Veith, 1990). This experience left her weak and with the notion that her death was imminent.
1856 (August) - 1872: Productive Years. After her return from the Crimea, Nightingale sought to make major reform in the status of the Army medical establishment based on her recent Crimean experiences. Because of her expertise in public health issues, she was effective in also bringing public health and hygiene standards to India. A second goal was to establish formalized nursing education which resulted in the development of the Nightingale School associated with St. Thomas' Hospital, London, in 1860. This period concludes with the renovations which she brought to the nursing curriculum in 1872.

1873 - 1910: South Street Years. As Nightingale's influence began to diminish, she began to exhibit the reclusive lifestyle which became characteristic of her later years. Although she did receive people, she rarely left her South Street flat. During her final years, she became blind, deaf, and disoriented. She died August 13, 1910 in her sleep.

A more definitive chronology of the events of Nightingale's life is found in Appendix A.

The scope of this study is the productive period which extends from 1856 through 1872. It was during this period that she was able to most frequently demonstrate power utilization.

**Definition of Terms**

For the purposes of this study, relevant terminology was defined in the following manner:

Power - The ability to achieve a desired outcome despite resistance. The strength of power is measured by the strength of the outcome.
Authority - A relationship in which one person is given the right to make decisions about outcomes or behaviors of another. Authority implies that the target individual must obey because of law, regulation, or organizational or cultural norms.

Influence - A relationship in which the behaviors of one person affects another, but is not based on any sanctioned authority.

Critical Event - An incident which retrospectively is determined to have had decisive importance in the outcome of an event.

Leadership - A particular type of power relationship in which one or more members of the group are recognized by the followers as being able to move the group toward the achievement of goals.

Data Sources

Primary and secondary sources from the Nightingale papers and literature were selected as the data base for this study. Selection was based on two criteria: availability and the value of the information source.

Sources were located through the libraries of Western Michigan University, Michigan State University, The University of Michigan and The Ohio State University. Interlibrary Loan supplemented the collections of these institutions and made available resources from remote locations. These volumes were supplemented by the author's private collection garnered in the United States, Canada and England.

Research from primary sources was conducted at the Nursing Archive of the Boston University Mugar Library and the Nursing Collection of the University of Michigan. In England, primary documents were read at The Royal College of Nursing, The Greater London Record Office, The Florence Nightingale Museum, the Wellcome Institute, and the British Library.
To the extent possible, primary sources were utilized for the research. These included Nightingale's original volumes such as *Notes on nursing* and *Cassandra* as well as a selection of personal letters written to and received from family, military personnel and government employees during the study period.

External criticism of the primary data is concerned with the authenticity of the documents (Polit & Hungler, 1991). The volumes used in this research are commonly recognized to have been authored by Nightingale. Many, such as *Notes on nursing*, have been in continuous print since the original dates of publication.

Of less clear origin are the twelve thousand plus letters which currently exist as the body of the Nightingale correspondence. The bulk of these letters are owned by The British Library, The Nightingale and the Verney Estates, St. Thomas' Hospital, and the Greater London Record Office. In each instance, the institution has had the letters authenticated as to author and classified as to recipient and date and place of origination.

Central to the validation of the Nightingale correspondence, however, has been the work by William Bishop and Sue Goldie which resulted in the publication of *A calendar of the letters of Florence Nightingale* published in 1983. This work represents a cataloging of the twelve thousand Nightingale letters. Each has been validated by at least two independent experts. The summary for each letter contains the location and date of the writing as well as the content. References to specific individuals or places are annotated to assist the reader. This work was begun in 1953 at the behest of the Florence Nightingale International Foundation associated with the International Council of Nurses who felt that an organized attempt should be made to find, validate and preserve the Nightingale relics.
It was through this effort that many of the Nightingale letters were found in small private collections. Although some were donated to public institutions such as the Wellcome Institute or the British Library, many others are still held in private hands. Although occasional access to these privately held letters is granted, this is severely restricted, generally requiring that the researcher have an international reputation as a Nightingale historian. Access to this content, consequently, is generally limited to summaries, such as that found in the Calendar, or to published collections such as that done by Vicinus and Nergaard (1990) or the Boston University Nursing Archive Collection of Letters of Florence Nightingale. The latter have particular value to the researcher as many of the letters are reproduced in the original handwriting which assists the reader in establishing validity.

Less readily available is the correspondence of those to whom Nightingale directed many of her letters. This is particularly true of the Herbert correspondence which is privately held. Consequently, secondary sources were generally used to document his letters and diaries.

The secondary literature represented a wide variety of sources written from the mid-nineteenth century to as recently as 1992. Of primary importance were the two biographies of Nightingale. The first was a commissioned work completed in 1913 by Sir Edward Cook and represents the initial effort to reconstruct the life of Nightingale from the existing records and letters. This remains as the seminal work for its chronology and completeness and has been the basis for several subsequent volumes.

The second, authored by Cecil Woodham-Smith and published in 1953, is considered the more complete because of the author's access to correspondence including the Nightingale family papers, the Mohl-Nightingale correspondence, the
Hilary Bonham-Carter correspondence and the Leigh-Smith papers. The nearly forty year lapse from the publication of the first and second biographies represents a period during which a dearth of Nightingalean study existed.

A more recent biography by Elspeth Huxley (1975) represents a simpler volume for the reader, but is notable for the photographic collection found in the work. Present are pictures of Nightingale throughout her life as well as the people who played major roles with Nightingale in helping her to achieve her goals.

Each of these biographies was completed from primary sources. Minimal works were published from 1955 to 1985.

Most recently, the work by Vicinus and Nergaard (1990) offers a revisionist's viewpoint of Nightingale substantiated by existing letters. This volume attempts to provide context as well as primary references. In addition, the text supporting the letters is compiled in such a manner as to offer the most objective view of Nightingale currently in print.

The second criterion for data source selection was the value of the documents through the process of internal criticism (Polit & Hungler, 1991). This process identifies whether or not the documents are in agreement with other existing documents, whether the evidence is analyzed in a non-biased manner, and whether the conclusions are supported by the evidence which is presented.

The documents selected for this study appropriately withstand internal criticism with occasional exception. Falling in the latter category is Smith's (1982) Florence Nightingale: Reputation and power. This volume represents the only known examination of Nightingale's use of power outside of the current study.

Wide variations exist between Smith's interpretation of the data and other authors who have examined the same information. The main difference exists in
what is perceived to be Nightingale's motivation for her actions. Most authors interpret her letters and diaries relative to the reason for her pursuing nursing in such a manner that her motivation had a deeply religious orientation and that this resulted in an altruistic motivation. These authors include Cook (1913), Goldie (1987), Huxley (1975), Palmer (1977, 1983a), Vicinus and Nergaard (1990), Widerquist (1992) and Woodham-Smith, (1953).

Smith has interpreted the same data in such a manner that he states her motivations to be entirely self-serving. While his volume is used for comparison purposes, his conclusions have not been validated by any other source.

Several biographies were not used as reference because of the hagiographic view of Nightingale which they represent. These include Lytton Strachey's (1988) view of Nightingale found in his volume Eminent Victorians. A similar criticism is made of O'Malley's (1934) Florence Nightingale 1820 - 1856 and Wintle's (1920) The story of Florence Nightingale: The heroine of the Crimea

Data Sorting

Data collection started in 1981. Initial sources were determined by using international data base searches. This was followed by the location of sources in libraries and private collections in the United States and England. Primary documents were read and sorted on three occasions in English locations during 1981, 1985, and 1987.

As the first step in organizing the data, it first had to be determined what constituted the power acts which were to be discussed. Power has previously been described as being measureable by the observable change which occurs as the result

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of the utilization of power. Therefore, the events to be discussed had to have resulted in significant change.

This assumption helped to limit the period of time which the study encompassed. While Nightingale had created immediate change during her stay at Harley Street and in the Crimea, none of these had lasting effects or societal change. The years in which she was productive with lasting social reform started after her return from the Crimea and extended through the major renovations to the Nightingale School. This period includes the years of 1856-1872 and has been called her "productive years."

During this period, three major reforms occurred. These included the reform of the Army through the establishment of the Royal Commission, the establishment of the Nightingale School at St. Thomas', and the hygienic reforms brought to India. It was determined that all would be included within the scope of the study.

As primary and secondary documents were read, a process evolved in order to further sort and organize data. Documents were first read for content and consistency with other known documents. Primary Nightingale letters were noted as to content, location, date, recipient and accuracy to known printed copies.

After the concept of power was selected as the variable for study, documents were reread for content which related to power and power acts as they related to the selected events. Documents were searched for words such as "power," "authority" and "effect." Evidence of change instituted by Nightingale was also sought. This became the basis for determining the outcome of the power act.

The area of focus became the years 1854-1872 which included the Crimean and post-Crimean periods. This time was specifically selected because the available
data indicated that the vast majority of the change instituted by Nightingale was completed within this time span.

Particular attention was paid to relationships which were formed and abandoned as evidence of power contacts. For this documentation, the documents were searched for letters to politicians and physicians. Much of this data was found buried in letters to family members in which references to her accomplishments or intentions were made.

It was determined that little existed in the Nightingale literature which specifically addressed the concept of power. Consequently, it was necessary to proceed with an analysis of the concept of power which would determine its characteristics and define the method of data analysis.

Concept Selection and Analysis

The process of concept selection and analysis which was followed was as outlined by Walker and Avant (1988). The steps and strategies which were used were as follows:

1. Concept selection: This process involves the determination of the concept to be used as a variable for research purposes. In this instance, power had been predetermined as the variable.

2. Aim of the analysis: This step answers the question as to why the analysis is being conducted. In this instance, the purpose was to define the parameters and characteristics of the concept and to clarify the specific usage of the term as this may vary from common usage. Defined parameters allow for application to specific instances or events.
3. Concept utilization: Through the process of using dictionaries, thesauruses and pertinent literature, all possible usage of the term power is determined, even if it appears that there may not be a direct relevance to the concept as it may be applied to the specific events under study. For instance, power, as defined in the unabridged edition of the *Random House Dictionary of the English Language* (Stein, 1967) has twenty-six definitions. These range from acting in a manner which accomplishes goals to theological, military and mathematical definitions to power as obvious forms of energy such as electrical or atomic. Relevant and related definitions should be retained as the basis for determining parameters of the concept.

4. Determination of defining attributes: From the literature, common characteristics are determined to consistently be present in examples of the concept which relate to the relevant definitions. In this instance, power was found to have the characteristics of power base or source, extent of power, subsets of authority and influence, outcomes of the power act which may be positive or negative, and to be relational in nature. The utilization of power may change from situation to situation. Power is associated with a position and is not found to be inherent within an individual.

5. Development of model cases: In the Walker and Avant (1988) model, the authors construct model cases in order to provide examples of the concept. For the purposes of this dissertation, however, it was decided to utilize the events during Nightingale's productive years in order to determine her power usage. These events as previously described included:

1. Nursing education, especially as it related to the establishment and maintenance of The Nightingale School, St. Thomas' Hospital, London.
2. The reform of the health of the British Army as it related to the health of the Army, the establishment of the Army Medical School and the establishment of medical statistics.

3. The establishment of public health in India during British colonization.

Data Analysis

The degree to which power was exerted was measured by the degree to which the desired outcome was achieved. Bennis and Nanus (1985) state that power is the energy which translates intentions into reality and sustains it. The reality of power is the observable outcomes which occur because of the power act (Yukl, 1989).

Additionally, power was examined as to the constituents of the power act as determined by Dahl (1957). These were consistent with the characteristics found to be the parameters of power in the concept analysis. These included:

1. Source or domain of power.
2. Means or the instruments of power.
3. Amount or extent of power.
4. Range or cost of power.
5. Extension of power.

The source of power contained subsets determined to be the bases described by French and Raven (1959) and included:

1. Expert power - that requiring specialized knowledge.
2. Reward power - that which tangible or intangible gains.
3. Coercive power - the application of actual or potential sanctions.
4. Legitimate power - that which is granted through law, regulation, or organizational or cultural norm.

5. Referent power - the identification with another person or movement for the purpose of approval by other groups or organizations.

Study Limitations

Historical studies are limited by the nature of the available data and by the biases of the researcher. In the case of this study, the following limitations were identified as they related to data collection and analysis:

Data Collection

1. Control could not be exerted over the quantity or quality of existing Nightingale documents.

2. Data was limited to that which was available through research of primary documents housed in the British Museum, The Nightingale Museum, the Greater London Record Office, The Wellcome Institute, The Royal College of Nursing, Mugar Library, The Nursing Collection at The University of Michigan; published primary Nightingale documents reproduced in their entirety in print and microfiche, and secondary documents available through local library and interlibrary loan resources.

Data Analysis

1. Analysis of the data was conducted on a logical rather than a statistical basis. Therefore, an increased possibility of subjectivity and increased bias existed.
2. Historical research is non-experimental. Therefore, variables were not manipulated or controlled.
CHAPTER IV

THE LIFE AND TIMES OF FLORENCE NIGHTINGALE

Events in the Early Life of Florence Nightingale

The life of Florence Nightingale was one of privilege associated with family wealth. Born May 12, 1820 in Florence, Italy, she was named after the city of her birth. Florence was the second daughter and last child of William Edward (WEN) Nightingale and Frances (Fanny) Smith Nightingale. Both parents were of wealthy English heritage which allowed them to provide a standard of living for their children which included frequent travel, a classical education and social prominence. All of this was consistent with the standard set for the landed gentry in the pre- and early Victorian eras.

The original family name was Shore. Upon the impending inheritance of the family estate in Derbyshire from his mother's uncle, Peter Nightingale, WEN assumed the name of Nightingale as part of the terms of the will (Keen, 1982).

WEN built a new home on the property called Lea Hurst where Florence spent much of her early life and summers in her adolescent years. The home was considered too small by Victorian standards (fifteen bedrooms), was cold, and difficult in which to entertain. Consequently, in 1825 the second family estate of Embley Park in Hampshire south of London was purchased and became the primary family residence (Woodham-Smith, 1951).

Family life within the Nightingale home would be considered dysfunctional by today's standards. Miss Nightingale had a difficult relationship with her mother. Fanny was considered a beautiful woman whose primary objective was to entertain
on a lavish scale and to maintain social prominence. Although Fanny would have preferred to maintain a home in London, a request denied by WEN, spring and autumn expeditions were conducted annually to the capital so that Fanny might be a part of the social season.

Florence did not share her mother's need to entertain or to be entertained. She frequently found the extended stays in London to be nearly intolerable and feigned illness as a matter of routine in order to be excused from social functions. This helped to establish a pattern of reclusive lifestyle which was to stay with her throughout her lifetime (Cook, 1913).

Nightingale also maintained a difficult relationship with her sister Parthenope (Parthe or Pop). A year younger than her elder sibling, Florence was considered to be more intelligent, more assertive and more studious than her sister. Parthe retained a strong bond with her mother and shared many of the same social goals. She became accomplished in her own right as a portrait painter, but received little recognition during her lifetime. Several of Parthe's portraits of Florence exist and are the prime records of Nightingale's appearance as a young woman. Documentation of the intolerance which Florence felt for her sister's lifestyle and the competition which existed between the two for family support appear in letters dated well past 1870 (Bishop & Goldie, 1962, 1983; Vicinus & Nergaard, 1989).

The most positive relationship during Florence's formative years existed between Florence and her father. WEN conducted lessons in languages, philosophy and history for both of his daughters. He also aggressively sought tutors for other classical subjects including literature and mathematics, at which Florence excelled. Although not pleased with Florence's later decision to pursue nursing, it fell to WEN to pave the way for Florence both financially and in combating her mother's resistance to
the plan. In can be concluded that Nightingale's early life was a difficult struggle for freedom, independence and self-fulfillment. Long term relationships remained elusive with both men and women. Letters indicate that Nightingale tended to form emotionally dependent relationships with women who were her equal intellectually and whom she felt would be sympathetic to her needs and whims. When this did not occur in an unconditional fashion, the friendship was dropped and the experiences unforgiven (Monteiro, 1990; Vicinus & Nergaard, 1989).

Relationships with men also proved to be longstanding if Nightingale felt that they could be useful in helping her achieve her long-term goals. As a young woman, Florence was pursued by several suitors. Among these were Richard Moncton Milnes, who became a politician, humanitarian and philanthropist, as well as Henry Nicholson, her cousin. Each might have provided Florence with the emotional support she required. Yet, Nightingale saw these relationships as limiting and useless (Bishop & Goldie, 1983; O'Malley, 1934). This was to become particularly evident in her later dealings with physicians and politicians. In each instance relationships were built distinctly for the purpose of goal achievement—not for friendship or social enlightenment (Brook, 1990; Cope, 1958).

Critical Incidents in Nightingale's Development

Critical incidents represent those circumstances which retrospectively are determined to have decisive importance with respect to outcome. In the case of Nightingale, at least six experiences are watershed events in her development which helped to determine her ability to create change and utilize power in later life.
Nightingale's Call to God

On February 7, 1837, at Embley Park, Nightingale described in her diary an incident which she states was a call from God (Bishop & Goldie, 1983; Cook, 1913). Woodham-Smith (1951) describes this as being similar to the incident experienced by Joan of Arc in that there was a clear voice speaking in human words. This voice called Nightingale to God's service but did not indicate the path which this service might take. It was not until 1844 that she understood that this was to be in the form of nursing. Nightingale felt that this experience brought form and substance to her life beyond the Victorian social experience.

Nightingale came from a mixed religious background. Her family were established members of the Church of England. The estate at Lea Hurst contained a private family chapel used when the family was in residence (Keen, 1982). She also spent time exploring the Unitarian Church and Roman Catholicism (Newton, 1949). However, Nightingale became highly critical of established religion, stating "the most frightful crimes which the world has ever seen have been perpetrated to please God" (Calabria, 1990, p.68). Consequently, she rarely overtly practiced religion in her adult years, preferring to believe in a Supreme Being which was perfect and eternal (Palmer, 1982). Further, she believed that God developed laws which governed the order of the universe. It was these laws to which nursing must abide in order to place a patient in the best possible condition for Nature (God) to act (Nightingale, 1859).

Nightingale documents at least two further incidents of calls from God in her lifetime. However, it does not appear that either had the effect of the first. It is clear that a profound belief in God, the Supreme Being, did guide her throughout her lifetime and was a significant force in her decision-making and value system. She rejected the prevailing doctrines of predestination, damnation and original sin
(Calabria, 1990). Her sense of being in control of one's destiny and the need for mankind to assume responsibility for its actions allowed her to direct the massive changes both in her own life as well as engineering social change in established English society.

**The Grand Tour 1837-1839**

As was the pre- and early Victorian custom, wealthy families took extensive European tours, living abroad for long periods of time. The was the second tour for the Nightingale family, the first occurring immediately after the elder Nightingale's marriage and resulting in both daughters' births occurring outside of England.

The second tour, which extended from September 8, 1837 to April 6, 1839, was planned for the purpose of expanding and refining Parthe's and Florence's education. The tour included extended stays in France, Italy and Switzerland (Cook, 1913).

In a diary kept by Florence during this period, she indicated that she was able to make political observations, become familiar with architecture and observe fine art (Cook, 1913). In later life, these experiences served as the basis for refined hospital design and reform of the sewer system of London. Further, it allowed her the opportunity to begin to work within the political system through which she established her major social reforms after the Crimean War.

During an extended stay in Paris, Nightingale became friendly with Mary Clarke Mohl who introduced Nightingale to the intellectual circle of whom Mohl was a part. This gave Nightingale access to the great thinkers of the time, including M. Mohl's husband, Julius Mohl, Chateaubriand and Benjamin Jowett. The intense discussions which occurred with these individuals allowed her to form social
opinions, develop philosophical arguments, and become less publicly shy and more articulate (Monteiro, 1990). Perhaps the most subtle effect of the travel was a break in the reclusive lifestyle which she had developed since early adolescence.

Kaiserswerth

Kaiserswerth, located in Germany just north of Düsseldorf, was an independent, non-denominational religious organization which prepared deaconesses for service to others (Dock & Stewart, 1932). Established by Pastor Theodor and Mrs. Frederike Fleidner in 1836, it represented one of the few institutions in the world which offered formalized training in nursing for lay women.

Nightingale was told of this institution by both Benjamin Jowett and the German Ambassador to England when each learned of her desire to pursue nursing (Calabria, 1990; Palmer, 1981). There were four divisions under which women might be trained: nursing; care of children; relief of the poor; and work among unfortunate women (Nutting & Dock, 1907).

Nightingale visited the institution on two occasions. The first was July 31 - August 13, 1850. This two week visit permitted her to become familiar with the institution and to establish that she wished to return for formal training.

Despite family opposition, particularly that from her mother, Florence was able to return for a three month period from July 6 to October 7, 1851. This constituted the only formalized training which Nightingale was to receive in nursing. This experience influenced the manner in which she was to later organize nursing education, including the content of the nursing curricula and the inclusion of a probationary training period for students (Palmer, 1981).
Relationship With Sidney Herbert

Florence Nightingale was known to and friendly with many social reformers and prominent politicians of the time in England as well as in Europe. These included Charles Darwin; Samuel Gridley Howe and his wife, Julia Ward Howe; Benjamin Jowett; Arthur Clough; and Lord Palmerston (Cook, 1913; Monteiro, 1990; Woodham-Smith, 1953). However, it was her friendship with Sir Sidney Herbert which saw the most benefit to Nightingale both directly and indirectly.

Sidney Herbert was first introduced to Nightingale in Rome in 1847 (Monteiro, 1990; Woodham-Smith, 1951). In 1852, he was appointed Secretary at War, the position through which he would ultimately be responsible for dispatching Nightingale to the Crimea. He and his wife Elizabeth were at least partially responsible for Nightingale obtaining the position of Matron at Harley Street.

Following the Crimean War, Nightingale was able to use her friendship with Herbert to promote health reform legislation in Parliament and to act as an interim between herself and Victoria. His dying words indicated his remorse that he could not continue to carry out plans outlined by Nightingale (Woodham-Smith, 1953).

Harley Street

On August 12, 1853, Nightingale started in her first position as Superintendent for The Establishment for Gentlewomen during Illness in Harley Street (Cook, 1913). (This is referred to as the Institution for Sick Gentlewomen in Distressed Circumstances by Woodham-Smith, 1953). During her brief employment, she first demonstrated skills in administration and leadership. She instituted strict rules for the conduct of nurses. She physically reorganized the institution with innovations such as patient call bells and dumbwaiters, thus alleviating the need for
nurses to carry trays from the basement preparation area. Nightingale was negotiating a new position at the reorganized King's College Hospital which would have included a school of nursing when the Crimean War disrupted her plans.

The Crimean War 1853 - 1856

By most standards, the Crimean War was neither a productive nor well planned conflict. Even the cause of the war has been in some dispute. A few see this as a Holy War with control of the Keys to the Holy Sepulchre as the major area of dispute. While this may have been the immediate precipitating factor, the broader cause is usually cited as control over the port of Constantinople and therefore control over the Eastern Mediterranean and the overland route to the East (Judd, 1975; Schultz, 1991).

Although Turkey declared war on Russia on October 5, 1853, Britain and France did not enter the conflict on the side of Turkey until March 28, 1854 after the Turkish fleet had been sunk in the Black Sea. This represented the first conflict for Britain since the close of the Napoleonic Wars after the Battle of Waterloo in 1815 (Altick, 1973). During the intervening years, few renovations had been made to the War Department, supplies were lacking and leadership was aging (Judd, 1975; Kennedy, 1987; Morgan, 1988).

Reports of the poor conditions under which the British soldier had to exist were sent to the London Times by William Howard Russell, thought to be the first war correspondent to report from the front lines. Additionally, his accounts were speeded to the British public by the development of the telegraph which allowed Britain to be informed of events within days of their happening as opposed to weeks or months that an overland route would require. The English public, accustomed to

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victory in battle, was appalled by the reports of the carnage of the English soldier. Consequently, the government was petitioned for improvement (P. Kalisch & B. Kalisch, 1986). It was under these circumstances that Nightingale agreed to take a party of women to Scutari for the purpose of reducing the mortality rate and improving the hygienic standards.

In fact, the mortality statistics were horrifying. At the end of the war, it was estimated that 18,058 fatalities had occurred in the British camp. Of these only 1,761 soldiers were immediately killed in action. The remaining 16,297 mortalities were as an indirect result of wounds or, more commonly disease. The vast majority of these deaths, which represented nearly a 60% mortality rate, occurred prior to Nightingale's arrival (Baly, 1986; Judd, 1975).

On disembarking at Scutari on November 4, 1854 with thirty-eight women, Nightingale found both filthy conditions and resistance from the medical establishment toward her mission. Because the major battle fronts were in the Crimean Peninsula, the injured had to be transported by ship across the Black Sea, a distance of nearly three hundred miles. Those who survived the trip were housed in the Barrack Hospital which contained more than fourteen miles of straw palette beds eighteen inches apart. The floor tiles and walls were saturated with human excrement (P. Kalisch & B. Kalisch, 1986). Yet, Miss Nightingale was denied access to the patients by the chief medical officer, Sir John B.O. Hall.

Contact was allowed when casualties of the Battle of Inkerman, fought November 5, 1854, arrived and overwhelmed the available facilities. Nightingale immediately set about cleaning and establishing a diet kitchen and laundry. She established standards of care which included daily wound dressing and bathing privileges for the soldiers. Six months were required to establish order (Cook, 1913).
Nightingale remained at Scutari until the conclusion of the war, leaving for England on July 28, 1856. During her stay, she had contracted "Crimean fever" (probably typhus), a condition from which she never fully recovered (Cook, 1913; Veith, 1990).

It was this twenty-one month period which was thoroughly documented by war correspondents and through which Nightingale obtained fame. She returned to England as a heroine. It is from this experience that she was later able to carry out social reform and establish the basis of nursing education.

The Productive Years

On her return from the Crimea, Nightingale was ill, probably suffering from the combined effects of Crimean fever and exhaustion. Additionally, evidence exists which suggests that Miss Nightingale may have had an autoimmune disorder which left her chronically fatigued and with physical symptoms such as joint swelling and heart palpitations (Veith, 1990).

She spent a brief, reclusive period at Lea Hurst attempting to identify how her life would proceed from this point. On the one hand, there was the notion that she had completed her service to God through her experiences in the Crimea. Surely, this must have been God's intention. On the other hand, there remained the fact that much needed to be accomplished in the areas of public health, the state of the army and general hygiene. In letters to Sidney Herbert, Benjamin Jowett and others, she began to identify the nature of her planned reform (Bishop & Goldie, 1983; Vicinus & Nergaard, 1990).

On September 17, 1856, Nightingale met with Queen Victoria and the Prince Consort in the summer royal home in Balmoral (Huxley, 1975). This meeting
signaled the beginning of the post-Crimean productive years. During this interview, Nightingale was able to impress upon the Queen that substantial reform was needed within the army medical establishment. It was Nightingale's contention that it was not the war itself which had cost so many British lives, but rather the system, or lack of a system for the handling of the personnel which had failed. Nightingale had been able to document through her statistical analyses that of every eight deaths, seven had been the result of disease rather than war wounds (Benson, 1992; Cohen, 1984).

Victoria and Albert were both impressed and supportive of Nightingale's proposed changes. Victoria is reported to have said, "We [indicating the royal "we"] are much pleased with her" (Cook, 1913, vol. 1, p. 324). Later, in a letter to the Duke of Cambridge, Victoria stated that she wished Nightingale were an official part of the War Office (Woodham-Smith, 1953). However, it must be remembered that the Queen's power was limited in securing these changes and that it would be necessary for Nightingale to have these ideas approved by the Minister for War, Lord Panmure.

During the next fifteen years, Nightingale was extremely productive. During this period, she was able to establish the Nightingale Training School at St. Thomas' Hospital and bring reform to hospitals, workhouses and infirmaries (Huxley, 1975; Vicinus & Nergaard, 1990). Through the establishment of the Royal Commission, she brought about the remodeling of hospitals, instituted the Army Medical School, introduced female nursing into military hospitals, and reorganized the Army Medical Department (Cope, 1958; Nightingale, 1863).

This period also represented the time during which some of her most notable publications were produced. Several of these include:

1859 - Notes on nursing: What it is and is not
1863 - Notes on hospitals
1865 - Suggestions on a system of nursing for hospitals in India

1867 - Suggestions on the subject of providing, training and organizing nurses for the sick poor in workhouse infirmaries

This is not to suggest that Nightingale was not productive after 1872. However, the majority of her work was either completed or the groundwork had been laid by that date. Consequently, the post-Crimean period through 1872 is known as the productive years.

Nightingale lived until the age of ninety, dying peacefully in her sleep in her South Street flat in London on August 13, 1910 (Huxley, 1975). Many of the patterns which she had established early in life—a reclusive lifestyle and surrounding herself with staunch supporters—continued until the time of her death. She was recognized late in her life for her accomplishments by receiving The Order of Merit in 1907, the first to be bestowed on a woman (Cook, 1913).

The Cultural Context of Nineteenth Century England

An examination of the ninety years of Florence Nightingale's life reveals a pattern of the use of privilege and prestige. An examination of the cultural context of nineteenth century England defines the parameters within which Nightingale was able to succeed.

The year of Nightingale's birth, 1820, coincided with the end of the regency and the accession of George IV. It also saw economic, political and religious change following twenty-three years of war and the defeat of Napoleon in 1815 at the Battle of Waterloo.

The previous century had been characterized as the age of reason in which it was thought that common sense and determination could reveal the natural laws
which governed the universe. With this came the appreciation of such works as Handel's *Messiah* and the appreciation of great art. Scientific discoveries such as Jenner's smallpox immunization and Priestley's isolation of oxygen established the base for medical innovation.

With this also came new manufacturing techniques and, eventually, the Industrial Revolution. This resulted in a societal change in which horsepower was substituted for manpower, the population tended to move from the village to the city and the factory was substituted for the home workshop. While the factory owner became wealthy, the poor became poorer with a decreasing opportunity for education or advancement. In essence, a two-classed society existed with a wide chasm between the two.

Following the Napoleonic Wars, social change occurred quietly, generally being instituted by Parliament. In 1832, the Great Reform Bill was passed which changed the pattern of representation and offered enfranchisement to many groups previously without vote. The Factory Act of 1833 offered the first real improvement in employment and safety conditions. Slave trade was also officially abolished in 1833.

Church reform offered religious freedom of choice and a decline in restriction. Growth was seen on Roman Catholicism as well as in protestant sects. Following the Catholic emancipation of 1829, Schultz (1991) states that religious freedom was a real choice rather than a political error.

The nineteenth century also saw the continuation of what had become "Imperial Britain." Her holdings extended around the world, creating the situation in which "the sun never set on the Union Jack." This expansion created the need for
efficient trade routes and may have played a part in the British entry into the Crimean War.

The monarchy became stabilized after the deaths of George IV in 1830 and William IV in 1837. This saw the accession of Victoria, a reign which was to extend for sixty-four years until 1901.

While reform marked the character of the nineteenth century and a rise in the middle class was seen, British society during the reign of Victoria remained restricted by gender. Women of social prominence were not expected to significantly contribute to society. Although most could read, educational opportunities were severely restricted, especially when compared with their male counterparts. Great emphasis was placed on learning household management techniques and the etiquette of entertainment.

It was under these circumstances that Nightingale created change and brought about social reform. A contemporary of Victoria’s, Nightingale was presented at court several times as a young woman and had formal meetings with the monarch after the Crimean conflict. Although supportive of Nightingale’s efforts, Victoria had direct and official access to power afforded to no other woman of the period.
CHAPTER V

CRITICAL EVENTS IN THE UTILIZATION OF POWER
BY FLORENCE NIGHTINGALE

As previously defined, critical events represent incidents which retrospectively are determined to have had decisive importance with respect to outcome. When examining the utilization of power by Florence Nightingale during the years 1856-1872, three events are deemed to be critical. These include:

1. The reform of the army medical system including the establishment of the Army Medical School and the introduction of female nurses into military hospitals.

2. The establishment of formalized secular nursing education and the introduction of educated nurses into settings previously considered to be non-traditional, such as the home and workhouses for the destitute.

3. The establishment of public health hygienic standards in India.

The Reform of the Army Medical System

On returning from the Crimea, Florence Nightingale declared, "I stand at the altar of murdered men and while I live I shall fight their cause" (Huxley, 1975, p. 150). Her contention was that the military establishment, for want of a workable system, had allowed thousands of soldiers to die unnecessarily. She took the task upon herself to revise the system and establish a base of preventative medicine (Cope, 1958).
The Royal Commission on the Health of the Army

When meeting with Queen Victoria and the Prince Consort in September, 1856, she offered to prepare a written report of her experiences and requested that a Royal Commission be established to inquire into the health of the army. Both were agreed to as necessary steps for reform.

However, Nightingale was aware that a Commission could not be established on the authority of the Queen alone. This also required the permission of Lord Panmure, the Minister of State for War. Although he sanctioned the request, he did so without enthusiasm (Cook, 1913).

Nightingale offered the chair of the Commission to Sir Sidney Herbert, who accepted the position on November 16, 1856 (Cook 1913; Huxley, 1975). After lengthy discussions with Panmure, the composition of the Commission was established as a pro-reform group. With the exception of one member, all were candidates which Nightingale had put forward (Cope, 1958).

Panmure resisted instituting the Commission. Out of frustration, Nightingale threatened to publish publicly her own report of the status of the army in the Crimea. This caused Panmure to move more rapidly, fearing public disapproval. The Royal Warrant for the Commission was signed on May 5, 1857, more than six months after the initial work on the establishment of the Commission had begun. The final report was completed the following August (Huxley, 1975; Woodham-Smith, 1953; Woodham-Smith, 1972).

Nightingale provided the Commission with the majority of evidence used to prepare the final report and all of the statistical documentation. Of these, the mortality statistics of the army in war as well as peace were most convincing. In addition to documenting cause of death on the battlefield (Chapter 4), she introduced
data which showed that the army in residence in England had death rates well above the national standard. For instance, she documented that in Kensington, a suburb of London, the civil death rate was 3.3 per thousand while the military death rate was 17.5 in the nearby Knightsbridge barracks. This is even more startling when it is realized that the civilian death rate included neonates, children, women of childbearing age and the elderly while the military was to have been composed only of healthy young men who had passed a rigorous medical exam (Cook, 1913; Huxley, 1975; Vicinus & Nergaard, 1990).

The Commission recommended the establishment of four subcommissions, each of which was to be chaired by Sidney Herbert. Their duties would be:

1. Put the barracks in sanitary order.
2. Found a Statistical Department of the Army.
3. Found an Army Medical School.
4. Revise the Army Medical Department, hospital regulations and the system for the promotion of medical officers (Cook, 1913; Vicinus & Nergaard, 1990).

Results of the Commission

1. Recommendations for reconstruction of army barracks were carried out with the assistance of Sidney Herbert, who personally visited every existing barrack in England, and Sir Douglas Galton, an engineer who became an expert on design and ventilation. Kitchen facilities were redesigned by M. Soyer, the chef who had accompanied Miss Nightingale to the Crimea (Huxley, 1975).

2. The Statistical Department of the Army Medical Department was organized by Dr. Graham Balfour. Recommendations were made as to how and what type of statistics should be kept for the army and hospitals in conjunction with Dr.
Balfour and Dr. William Farr. Nightingale developed methods for graphing statistics known as "coxcombs," a type of pie chart with colored sections. Miss Nightingale was the first woman to be inducted into the Royal Statistical Society. She published *Notes on matters effecting the health, efficiency, and hospital administration of the British Army*, an 800 page document, and distributed it to Parliament, the press and the Queen to emphasize her points relative to disease within the military (Cohen, 1984; Cope, 1958). She stated, "Statistics are history in repose, history is statistics in motion" (Keith, 1988, p. 149).

3. The Army Medical School, instituted in September, 1860 at Fort Pitt in Chatham, provided a two year post graduate course for physicians in the management of wounded, methods of purveying supplies and frontline diagnosis. Panmure was most reticent in implementing this part of the report. Consequently, the school opened without equipment or supplies, the requisitions having been ignored by the Director-General at the War Office (Huxley, 1975; Vicinus & Nergaard, 1990).

4. The remaining subcommission, called the "wiping" commission as it seemed to entail all remaining details, continued to revise policy for a thirty year period after the Commission issued its report. Nightingale had the most influence in the area of hospital design, for which she wrote *Notes on hospitals* in 1863, and *Introductory notes on lying in institutions* in 1873. She attempted to influence the design of the new military hospital at Nettley, but entered the process after major construction had already begun. However, she was successful in introducing female nurses into this military hospital, an idea which became normalized in the United States after the Civil War, but did not firmly establish itself in Britain until after World War I (Cook, 1913; Huxley, 1975; P. Kalisch & B. Kalisch, 1986).
Shortly after the issuance of the final report, Miss Nightingale collapsed August 11, 1857 from fatigue, malnutrition and stress of living with her family in close quarters at the Burlington Hotel in London. She went to Malvern for a water cure and prepared to die.

The Development of Nursing Education

Although the notoriety of Florence Nightingale came as result of her accomplishments during her twenty-one month stay in the Crimea and was directly associated with nursing, the development and implementation for a plan for formalized nursing education was of distinctly less importance to her than the reform of the Army. What evolved over the next several years was a philosophical basis upon which the education and practice of nurses could be based.

The Nightingale Fund

While in the Crimea, a grateful British populace wished to confer on Miss Nightingale some sort of honor in recognition of the numerous lives which she saved. Her family persuaded the committee assigned to determine the nature of this honor that Miss Nightingale would never accept a direct monetary sum for her personal use. As a result, the committee established a national appeal through which was netted nearly £45,000, approximately $1,750,000 in today's currency (Baly, 1986, 1990). This money, known as the Nightingale Fund was to be placed at Miss Nightingale's disposal in order to generally benefit the public well-being.

Contrary to popular belief, institutions for the training of nurses did exist in the mid-1800s, Kaiserswerth being a notable example. However, virtually none existed in the secular world. Miss Nightingale was adamant that nurse training could
and should exist away from religious orders. Through correspondence with Miss Nightingale, it was determined that a plan for formalized secular education of nurses should be implemented, using the monies garnered by the Nightingale Fund (Cook, 1913; Seymer, 1954).

The Development of the Nightingale School

Plans for a training school had been discussed with Miss Nightingale with Dr. Bence Jones of St. George's Hospital, London, prior to her departure for the Crimea (Baly, 1986; Cope, 1958). When the Nightingale Fund came into existence, Dr. Jones pressed Miss Nightingale for a definitive plan for a school's development. To this request she barked a reply, "People seem to think that I have nothing to do but sit here (at Scutari) and make plans" (Nightingale, 1855).

On her return to England in 1856, the disposition of the Nightingale Fund was an annoyance to Nightingale, distracting her from her other projects. Her August, 1857 collapse resulted in her physicians restricting her activity due to her cardiac status. She suggested that all future planning might be carried out by her confidant Mrs. Shaw Stewart, a plan rejected by the Fund Council (Baly, 1986).

While Miss Nightingale had not developed a specific plan for nurse education, she had developed a pragmatic philosophical stance about the nature of nurses and nursing in general. This belief system was at least partially documented in Notes on nursing: What it is and is not published in 1859.

Nightingale stated that nursing was to exist for the purpose of putting "the patient in the best condition for nature to act upon him" (Nightingale, 1859, p.8). This implied that the patient and the environment interacted, and that through knowledgeable manipulation of the environment, the nurse could alter conditions in
such a fashion as to allow healing to occur. She did not subscribe to predestination (Nightingale, 1859). The methods for care were contained in the thirteen canons outlined by Nightingale in her Notes (Dennis and Prescott, 1985).

Nightingale further defined the nature of nursing:

1. Nursing was both an art and a science. Therefore nursing was to be based on scientific principles and the practitioner of nursing should have the freedom and creativity to alter the environment as she saw fit. In these statements are seen some real contradictions by Nightingale. On numerous occasions she stated her opposition to belief in the germ theory and contagion by bacteria. She also believed in absolute discipline by nurses which tended to greatly limit freedom in the methods by which care was delivered.

2. Nursing and medicine were separate entities. This implied that although the goal of the two frequently were the same—the health of the patient—the methods and the educational needs were very different.

3. Nursing should be a profession. Therefore nurses must be educated specifically for the practice of nursing—not just in the management of households.

4. The person who was to be a nurse should be devoted to nursing but not from a religious order; have the discipline of the military; be educated, but preferably not be a "lady"; and retain the hardiness of the lower classes (Nightingale, 1859).

The Selection of the St. Thomas' Site

In 1859 the Fund Committee pressed the issue in regards to where a new school might be located. The only sites deemed appropriate were training hospitals which could potentially support the expense of a school. While Cook (1913), her major biographer, indicates that the selection process was a smooth one, records later
revealed that the decision to place the training school at St. Thomas' had political undertones and was motivated by monetary motives and the goals of Miss Nightingale—which had little to actually do with nursing education.

Although St. Thomas' Hospital eventually was selected, this was not the original choice supported by Nightingale. St. Thomas' was in a debilitated and dilapidated state. Physicians (called consultants then and now) and surgeons began lobbying for a new structure as early as 1832 (Baly, 1986). This became likely when, in 1858, the South Eastern Railway Company bought part of the St. Thomas' property to expand the railway.

Nightingale believed that this turn of events would allow her to have significant input into the design of the new hospital, a skill for which she had already gained recognition, having published articles on the subject in The Builder (Baly, 1986). Additionally, she anticipated that the hospital would be moved to a suburban site, one which she felt would provide more sanitary surroundings. She had collected data from hospitals in Edinburgh which suggested that poor hygienic standards and geographic location close to water sources promoted disease.

In order to gain these advantages, it appears that Miss Nightingale accepted certain compromises as part of the St. Thomas' agreement which previously had been unacceptable to her. First, she agreed that the current superintendent of St. Thomas' nurses, Mrs. Sarah Wardroper, would also be superintendent of the training school and would have absolute authority over the student training, admission and dismissal. Secondly, she agreed to the plan that nursing students could "give service" to the hospital. This meant that students could be used to supplement staffing needs (Baly, 1986). Both of these decisions would have a profound and negative effect on the development of nursing education.
The plan to move St. Thomas' Hospital to the suburbs collapsed after land in Lambeth, across the Thames from Parliament, was offered to the hospital governing board at a substantially reduced price. Miss Nightingale was dismayed at this decision, as she felt that the area was too damp. However, she honored the agreement to establish this as the site of the Nightingale Training School. A further disappointment came when she was not allowed to be involved in the design of the new hospital. Baly (1986) describes the plotting of Miss Nightingale as being nothing less than a Machiavellian intrigue.

The first group of probationers was admitted in June, 1860. The exact number is unknown. However, records reveal that it was approximately ten young women. Baly (1986) reports that of those admitted, two were dismissed for disobedience, one for drunkenness and one for ill health. One died from typhus. Additionally, others suffered serious illnesses of typhus and scarlet fever, but were able to continue their training. Only four of the original probationers were apparently able to collect a promised gratuity at the end of the second year after admission.

Shortly after the start of the training school, St. Thomas' Hospital moved to a temporary location in Surrey Gardens where it remained for nearly ten years while the Lambeth site was constructed. Miss Nightingale took little interest in the running of the nursing school following the deaths of confidants Sir Sidney Herbert and Arther Hugh Clough in 1861. Both had served integral functions in helping her accomplish military reform. Without their assistance, she seemed to lose interest in many of her projects.

This allowed the management of the school to fall to the Fund Council, to Mr. Richard Whitfield, responsible for providing suitable lectures to the probationers, and to Mrs. Wardroper. During this period, many complaints surfaced about the quality
of instruction and the manner in which the superintendent wielded her authority. Mrs. Wardroper maintained few records, which makes definitive data relative to admission, attrition and graduation nearly impossible to reconstruct.

**Nightingale's Role in Nursing Education Development**

The myth of Nightingale's involvement in the development of nursing education is that she perceived the need for defining a plan for the education of nurses, and, that on seeing the need, she put forth a scheme which was immediately adopted. Further, it is believed this plan enjoyed a century of longevity virtually unchanged. In fact, little of that is true.

While Nightingale did perceive the need to adequately train nurses in the secular world, she saw the Nightingale Fund as a mixed blessing which drew her attention from what she saw as more pressing matters.

The success of the Nightingale involvement with the training of nurses is simply that she made it possible—possible for a woman to have an occupation which was considered legitimate and would pay at least a living wage. The actual curriculum as was developed by Mrs. Wardroper and Mr. Whitfield at the Nightingale School and which Nightingale found deeply entrenched when she took a more active interest in the School after 1872, was not to Nightingale's liking. She would have preferred a pattern better based in the sciences, more time from ward duty to have formalized lectures, and considerably less dependence of the hospital on the probationary students for staffing. All of these are problems which remain with nursing education today (Fuld Trust, 1990).
The Reform of Hygienic Standards in India

Nightingale's changes brought to the sanitary system in India gave evidence of her world-wide fame and mastery of the subject of hygiene and health. The scope of her accomplishment is particularly impressive considering that all renovations were carried out from her South Street flat which bordered Hyde Park (Cook, 1913).

The State of Health in India

England had sought India as a colony because of the potential wealth in exportable goods. The English had driven the French out of India after 1754. This saw the rise of The East India Company as a private empire which existed solely for the purpose of financial gain for its owners and without responsibility for its actions. In essence, it was operating as a separate government (Schultz, 1991).

British India extended its powers after the implementation of Pitt's India Act of 1784 and the colonists were able to capitalize on the poverty and instability in the country. The Indian Army became particularly unsettled when a new gun cartridge was introduced which required that it be greased by pig or cow fat. This incensed both the Hindus and the Moslems. The end result was the Indian Mutiny of 1857 which saw the massacre of thousands of Europeans (Morgan, 1988; Schultz, 1991).

The British Army, which had gone to India in large numbers, was also dying in large numbers. It was noted that on her personal copy of Notes on the Army, Nightingale had written, "The British race has carried with in into those regions of the sun (India) its habits, its customs and its vices without considering that under a low temperature man may do with impunity what under a higher one is death" (Huxley, 1975, p. 198). In other words, the British Army had made no concessions for the environmental changes of the Indian climate.
Many of the same problems which existed in the Crimea—poor ventilation, inadequate sanitation, poor food, and inadequate clothing—continued to plague the Army in India. In 1859, the death rate for the British soldiers serving in India was 69 per thousand—causing even the Knightsbridge rate to pale by comparison.

**The Influence of Florence Nightingale**

When these conditions were brought to Nightingale's attention, she proceeded in the manner which had served her well in the past. She sought to establish a second Royal commission. The Royal warrant was signed in May, 1859. Data was collected by mail from all of the Indian Stations.

Nightingale was charged by the group with consolidating and interpreting the information. The result was two volumes totaling 2,083 pages. A much condensed version, done in twenty-three pages, was published as the official report and printed at Miss Nightingale's expense (Cook, 1913).

The unique feature of this report was that it contained woodcuts designed by Nightingale's cousin, Hilary Bonham Carter. These illustrations were designed to dramatize the nature of the needed reforms. Many were accompanied by caustic satire on the situation. For instance, one showed two Indian men struggling with a barrel used to haul human waste. The attending caption read "Indian Drainage System" (Huxley, 1975). Nightingale was reported to have remarked that the Queen might look at the report because it had pictures (Woodham-Smith, 1953).

Unlike the previous commission which had finished its work in a few months, the Indian Commission sat for four years, adjourning in May, 1863. The general conclusion of the report was that in order to improve the general health of the British soldier, the general health of the Indian public must also be improved. Shortly after
the report's publication, a friend of Nightingale's, Sir John Lawrence, became Viceroy of India. His main objective was to right the sanitary wrongs. Nightingale became his chief advisor, and extended her undertakings to correction of the conditions of hospitals and workhouses.

In the long run, the relationship between Miss Nightingale and Sir John Lawrence proved unsuccessful. This became particularly apparent when he submitted a plan to the Government of India for introducing female nurses into hospitals in India. The plan which was submitted called for simultaneous introduction in seven hospitals at great expense. The plan which Nightingale had developed called for nurses to be employed in one hospital at a time with intermediate evaluation of the experiment. When the larger plan failed to be implemented, Miss Nightingale was criticized even though it bore little of her original work (Woodham-Smith, 1953).

The Indian situation was remedied when Miss Nightingale became acquainted with Sir Bartle Frere, the new Secretary of State for India. He sought to implement change in India by establishing a department for Sanitary Business within the India Office.

This so occupied Nightingale in establishing protocol for this office that she did not leave her South Street flat for thirteen months. As with the reform of the Army, Nightingale again collapsed in December of 1867. She again retreated to Malvern, taking with her only a cat and a footman for company.

While she returned partially restored, her health appears to have been permanently impaired. She frequently complained that she was slowing down and that it now took her three hours to do in what she could previously have accomplished in one (Cook, 1913; Woodham-Smith, 1953). Although she continued
to be very actively involved in public health renovation and became reinvolved with the training school at St. Thomas', she now was more recluse, carefully screening her visitors at South Street. This appears to mark the beginning of the end of her productive years.
CHAPTER VI

AN ANALYSIS OF THE UTILIZATION OF POWER
BY FLORENCE NIGHTINGALE 1856-1872

For the purposes of this study, power has been defined as the ability to achieve a desired outcome despite resistance. This is a derived definition based heavily on the concepts of Dahl (1957), Mechanic (1962), Salancik and Pfeffer (1977) and Zey-Ferrell (1979).

This definition includes the following assumptions about the nature of power as it was used to analyze Florence Nightingale's actions during the period of 1856-1872:

1. Power is a relative concept.
2. Power is situationally dependent.
3. The utilization of power involves a relationship between two or more people, families, groups or organizations.
4. The power relationship is asymmetrical. This asymmetry is situationally dependent and may change over the course of time.
5. Power may take potential as well as actual form. Therefore, the threat that a potential sanction may be implemented is as much an example of the utilization of power as the actual sanctioning act.
6. Power is the means to an end, and therefore, is not in and of itself a goal.
7. Power is not an inherent or personal attribute.
8. The greater the value which is attached to the outcome of the power act, the greater the power of the power-wielder.
The measurement of power is equivalent to the measurement of the outcome of the power act. In this instance, the measurement of power is equivalent to the outcomes of the power acts of Florence Nightingale as related to three previously described critical events which occurred during the post-Crimean period of 1856-1872. Minor attention will be given to events which occurred during the years 1853 to 1856 which helped to establish Nightingale's right to authority.

The analysis to be utilized in this dissertation will follow the constituents of the power relationship originally defined by Dahl (1957). The bases of power will be further examined according to the delineation of French and Raven's (1959) power taxonomy. The initial discussion will center on the differentiation of the sub-concepts authority and influence.

The Authority and Influence of Florence Nightingale

Authority has been previously defined as a relationship in which one person is given the right to make decisions about outcomes or behaviors of another. This authority is sanctioned by the strength of law or organizational or cultural norm.

In the case of Florence Nightingale, relatively few events occurred in her life which provided her with sanctioned authority. The two most notable were the assumption of the Superintendency of the Institution for the Care of Sick Gentlewomen in Distressed Circumstances in August, 1853, and her Superintendency of the English nurses in Turkey during the Crimean conflict.

In April, 1853, Elizabeth Herbert recommended to the Governing Committee of the Institution that Miss Nightingale would be an appropriate administrator (Woodham-Smith, 1952). Negotiations as to her duties for this position began immediately with the Governing Committee.
In a letter written to Mary Clarke Mohl, Nightingale states:

It is no use telling you the history of the negotiations, which are enough to make a comedy in 50 Acts....I can only say that, unless I am left a free agent & am to organize the thing myself & not they, I will have nothing to do with it. But as the thing is yet to be organized, I cannot lay a plan either before you or my people. And that rather perplexes them, as they want to make conditions that I shan't do this or that. ...I am to have the choosing of the house, the appointment of the Chaplain, & the management of the funds...(April 8, 1853).

Four months were required to complete the negotiations. At the end, she had won nearly every concession. While she was responsible to the Governing Board, she was granted complete control of all aspects of decision making and management of the Institution. This included who was to be hired as nurses, the terms of employment and potential reasons for dismissal.

Nightingale also controlled who could be admitted to the Institution as patients. Prior to her superintendency, admission had included a religious caveat in which patients were required to be members in good standing in the Church of England. Miss Nightingale removed this requirement, as she found this to be antithetical to basic Christian principles. This was to be a pattern which she followed in the implementation of the Nightingale School nearly a decade later.

Additional responsibilities included the physical management of the building at 1 Upper Harley Street. She oversaw improvements in the structure which included renovation for the purpose of lessening the physical load required of the nurses. She had dumbwaiters installed with a windlass system for movement. She designed and had installed a patient call bell system so that the attention of the nurse could be summoned other than when they were physically present in the room. Hot and cold running water was installed to every floor. A pharmacy was placed on the premises.
to avoid sending the nurses to the local apothecary shop to purchase individual doses (Vicinus & Nergaard, 1990; Woodham-Smith, 1953).

These renovations as well as the organizational structure which she implemented were of great concern to the Governing Committee. However, Nightingale reminded them that this was part of her contractual responsibility. She worked independently among members of the Committee, plying them with her needs and hoping to get her way. Her methods were made clear in a letter to her father:

> When I entered `into service` here, I determined that, happen what would, I never would intrigue among the Committee. Now I perceive that I do all my business by intrigue. I propose, in private, to A, B, or C, the resolution I think A, B, or C, most capable of carrying to the Committee, and then leave it to them, and I always win (December 3, 1853).

The renovation of Institution took little less than a year. At that time, Nightingale decided to look for a new position which would provide a greater and longer lasting challenge. She applied for the superintendency of King's College Hospital where her duties would include the training of nurses (Vicinus & Nergaard, 1990).

What intervened in this plan, however, was the Crimean conflict. Nightingale was approached by a private group to take nurses to the battlefront. She wrote a letter to Elizabeth Herbert, wife of Sidney Herbert and a member of the governing board of Harley Street. In it she states her concern for her current position but stresses the need to make some change in the reported conditions in the Crimea:

> I do not mean to say that I believe the Times accounts, but I do believe that we may be of some use to the wounded wretches.

> Now to business -

> (1) Unless my Ladies' Committee feel that this is a thing which appeals to the sympathies of all, & urge me, rather than barely consent. I cannot hereby honorably break my engagement here. And I write to you as one of my mistresses.

> (2) What does Mr. Herbert say to the scheme itself? Does he think that it will be objected to by the authorities? (October 14, 1854).
Herbert's letter requesting that she go on behalf of the British government crossed with hers in the mail. The negotiations of the position took a considerably shorter period of time than the Harley Street position as Nightingale left for the Crimea only six days after she accepted Herbert's offer.

Nightingale was to be "Superintendent of the female nursing establishment in the English General Military Hospitals in Turkey" (Cook, 1913; Goldie, 1987; Vicinus & Nergaard, 1989). While this seemed to be a broadly based appointment, the intent of scope of her duties was later to bring unrest.

Nightingale's acceptance at Scutari was slow. The medical establishment saw her as an annoyance, but this changed with the arrival of thousands of wounded after the Battle of Inkerman. An additional hardship had been imposed on the British Army due to the sinking of all of the supply ships following a hurricane which hit Crimean Peninsula one week after Nightingale's arrival (Judd, 1975).

Although acceptance by the medical community was difficult, Nightingale was able to bring some degree of order in a relatively short period. When it was proposed by the British government that more nurses be sent, Nightingale flared a reply. It appears that he was both upset at not being consulted. Her need for control is obvious in this letter:

When I came out here as your Sup it was with the distinct understanding (expressed in both your own handwriting & in the printed announcement which you put in the Morng. Chron. which is here in everyone's hands) that nurses were to be sent out at my requisition only, which was to be made only with the approbation of the Medical Officers here.

You came to me in your distress, & told me you were unable for the moment to find any other person for the office, & that, if I failed you, the scheme would fail. I sacrificed my own judgment, & went out with forty females, well-knowing that half that number would be both more efficient & less trouble- & that the difficulty in inducing forty untrained women, in so extraordinary a position as this, (turned loose among 3000 men) to observe any order or even any of the directions of the Medical Men, would be Herculean.
...I will not say anything of the cruel injustice to me.....You must feel that I ought to resign, where conditions are imposed upon me which render the object for which I am employed unattainable- & I only remain at my post till I have provided in some measure for these poor wanderers (December 15, 1854).

Battles over her authority status persisted. A second group of nurses were sent and apparently were independent of Nightingale's control. To this situation she fired a letter to Sidney Herbert:

You have not stood by me, but I have stood by you.... You shall judge for yourself. Such a tempest has been brewed in this little pint-pot as you could have no idea of. But I, like the ass, have put on the lion's skin & when once I have done that, (poor me, who never affronted any one before), I can bray so loud that I shall be heard, I am afraid, as far as England (December 25, 1854).

At a further point in the letter, she threatened again to resign.

Another point of discontent came when she wished also to assume the control of nurses in the Crimean Peninsula. In a letter to Herbert, she demanded that the nurses be put under a single command to be headed by herself. This was resolved by an investigation and a General Order issued to the Chief of Staff. In part, it read:

It had been intimated to the Secretary of State for War that female nurses have been introduced into one of the hospitals of the Army in the East by the Medical authorities without the concurrence of the Lady Superintendent of the Female Nursing Establishment.

...It appears to me that the Medical authorities of the Army do not correctly comprehend Miss Nightingale's position as it has been officially recognized by me (Lord Panmure). ...Miss Nightingale is recognized by Her Majesty's government as the General Superintendent of the female nursing establishment of the military Hospitals of the Army (March 12, 1856).

While this solved the immediate issue as to who was in charge of the nurses transferred to the Crimean Peninsula, it caused later difficulties with the medical authorities who wished to not see her be influential in the reform of the medical establishment.

From this point, it appears that Nightingale's power extends much more from an influence base rather than from an authority base. The reports sent by William Howard Russell to the London Times brought adulation, money and fame. These
provided her with a base through which she was able to effect significant change for the next twenty years.

Influence has been defined as a relationship in which the behaviors of one person effects another, but is not based on any sanctioned authority. It was this mode of power that Nightingale primarily used after her return from the Crimea and through which she was able to bring about her most significant and lasting change. Cultural expectations as to the role of women caused her to be unable to run for public office or to directly address Parliament. However, she was able to utilize name recognition, threaten sanctions, and attract the attention of the powerful. The remainder of this chapter will address the manner and degree to which she was able to implement her power bases.

The Sources of Nightingale's Power

A source of power is the point at which power originates. This includes the types of sanctions one can wield in the power relationship. French and Raven (1959) have delineated these as the bases of power and have described them in a power taxonomy of reward, coercive, legitimate, expert and referent power.

Nightingale did not appear to consciously use reward power. This appears to be based on her strong religious beliefs that one was to work for the greater good of mankind. This belief system drove her in her work ethic and she frequently attempted to impose this ethic on others. In one of her diaries in 1857 she wrote:

Since I was 24 (probably long before, but certainly since then), there never was any vagueness in my plans & ideas as to what God's work was for me. I could have taken different kinds of work - education, Hospitals &c. But each was definitely mapped out in my mind after a plan (Vicinus & Nergaard, 1990, p.178).
Woodham-Smith (1953) accuses Nightingale of working Sidney Herbert to death. There does appear to be documentation that she thought he ought to pursue his goals in spite of physical illness. In 1858 realizing that she was likely to chastise him for missing an important conference because of neuralgia, he wrote to her, "Here I am idling away my time in bed. I have been heartily ashamed of myself these last few days" (p. 219).

Those who were least sympathetic to Nightingale's work ethic appeared to be Fanny and Parthe. In 1857 when she was hard at work on the Sanitary Commission, she observed in a letter to Mary Clarke Mohl that her mother and sister did not share her work motivation: "The whole occupation of Parthe and Mama was to lie on two sofas and tell one another not to get tired by putting flowers into water...I cannot describe to you the impression that it made on me" (Woodham-Smith, 1953, p. 288).

Nightingale's views on God and natural organization were summed up in a letter dated July 6, 1859, to WEN. In it she states that while one can determine the character of God, the essence of God was a mystery:

 Granted we see signs of universal law all over this world, i.e. law or plan or constant sequences in the moral & intellectual as well as physical phenomena of the world - granted this, we must, in this universal law, find the traces of a Being who made it, and what is more of the character of the Being who made it. If we stop at the superficial signs, the Being is something so bad as no human character can be found to equal in badness. And certainly all the beings He has made are better than himself. But go deeper & see wider, & it appears as if this plan of universal law were the only one by which a good Being could teach his creatures to teach themselves & one another what the road is to universal perfection. And this we shall all acknowledge is the only way for any educator, whether human or divine, to act - viz. to teach men to teach themselves and each other (July 6, 1859).

Nightingale held true to her belief system, and therefore did not exercise with a system. Movement toward the greater good of society was sufficient reward in and of itself.
Nightingale did not appear to sanction the use of coercive power. Her belief system allowed that she would not have to sanction. Non-accomplishment of stated goals was punishment enough for those involved in reform. However, Nightingale appeared skilled in using coercive techniques, especially chastisement, using one individual against another, and talking with one person about another. The previously cited letter to her father indicating how she used "intrigue" when employed at Harley Street clearly sets forth her ability to use each individual to her own advantage.

When Lord Panmure appeared about to sink the opportunity of creating the Royal Commission on the Health of the Army, Nightingale perhaps used threat as a technique most effectively. In a letter to Sidney Herbert she stated her strategy:

three months from this day I publish my experience of the Crimea campaign, and my suggestions for improvement, unless there has been a fair and tangible pledge by that time for reform (February 12, 1857).

There is little to suggest that she would not have carried through with this particular threat. However, there were instances such as when in the Crimea and she threatened to resign in which the circumstances indicated that she actually had no plans on carrying through with the threat.

Legitimate power, the third base on French and Raven's taxonomy has previously been described under the section on authority. It should be noted that Nightingale's legitimate base steadily declined from its peak of the authority which she possessed in the Crimea. This represents a relatively small amount of the power base which Nightingale possessed.

However, it can be inferred from at least one of Nightingale's letters that she understood the concept of authority as that as being something which may have a positional base. In a May 1872 letter to Mr. Whitfield at St. Thomas', she reveals her...
displeasure relative to Mrs. Sarah Wardroper, matron and superintendent of St. Thomas' and her methods of exerting authority:

But we are just in time to prevent Mrs. W. from degenerating into governing like a virago. By talk, by being heard not felt. By speaking more than she observes all of which are almost the first elements of authority. She maintains authority by self assertion and she is losing it every day (May 18, 1872).

Expert power, by contrast, is the major power base exerted by Nightingale. Her expertise was first recognized and called upon by Victoria when she summoned Nightingale to Balmoral on 1856 shortly after her return to England. After her first interview with the Royal couple, the Prince Consort wrote in his diary: "She put before us all the defects of our present military hospital system and the reforms that are needed. We are much pleased with her" (Woodham-Smith, 1952).

The most concrete evidence of her expertise comes in the statistical information which she collected during and after the Crimea. She was able to take this information and present it in such a way as to be convincing to the point of being overwhelming.

Nightingale used comparative statements to drive home her point. Such an example was the comparison of the mortality rate from disease in the Crimea during the first year of conflict to the Great Plague of 1665 and the cholera attacks which had hit England during the latter eighteenth and early nineteenth centuries. She pointed out that if mortality had persisted for the full year as it did in January, 1855, and if the dead soldiers had not been replaced, the entire British army in the Crimea would have been wiped out without the assistance of a single bullet (Cohen, 1984).

As serious as the situation was, she was also able to make the argument that her reforms were responsible for the decline in the death rate, stating that her changes caused the death rate of the British soldier to not be much more than that of a sick soldiers in England by the end of the war. Further, the mortality rate of all British
troops in the Crimea was only two-thirds of what it was in England (Cohen, 1984). Not only did this argue that she had done a good job in the Crimea, but also that there was sanitary reform which could be undertaken in England to improve the health of the Army.

The culmination of her expertise appeared in the volume, *Notes on matters affecting the health, efficiency and hospital administration of the British Army*. When presented with this document, Dr. William Farr, the founder of medical statistics, wrote to Nightingale in adulation:

> This speech is the best that ever was written on diagrams or on the Army. I can only express my opinion briefly in 'Demosthenes himself with the facts before him could not have written, or thundered a better.' The details appear to be quite correct, but when I recover from the effect of the display of the great appalling subject, and have the diagrams before me, I will look into them again. It is however the perfection of writing with diagrams and tables before you, to render any reference to them by the reader unnecessary. This you have done (Cope, 1958, p.100).

It was through Dr. Farr that she also became involved in the reform of the health of India. On the basis of her expertise, the Royal Commission on the Sanitation for India was established in 1863. Again she was able to accomplish sanitary reform, dropping the mortality rate of the British soldier from 69 to 18 per thousand (Cohen, 1984).

Referent power appears to have played a minor role in Nightingale's achievements. While there probably were individuals who wished to identify themselves or their causes with Miss Nightingale, she did not wish this to occur.

After her return in 1856, Miss Nightingale made no public appearances nor did she issue any public statements. Concerned with her privacy, she actively sought to get to her home in Derbyshire without drawing public attention. She did this by traveling under assumed names. She got off the train at a station before the one near
her home and walked across the fields to Lea Hurst to avoid being noticed by locals who certainly would have recognized her (Cook, 1913; Woodham-Smith, 1953).

Additional Constituents of the Power Relationship

The additional constituents of means, amount, range, extension and cost serve to further explore the concept of power as it relates to Florence Nightingale. The first to be examined is means.

Means refers to the instruments which an individual may use to help implement the power relationship. While this may mean sanctions in some situations, Nightingale employed name recognition and her health status as tools which assisted her in utilizing power (Pickering, 1974; Veith, 1990).

Name recognition is an extension of Nightingale's heroine status on her return from the Crimea. While she did not wish to turn this into referent power situation, she was able to have access otherwise closed to her on the basis of her name alone. This was extended through her reputation as an expert which has been previously discussed.

The nature and extent of Nightingale's post-Crimean illness has been discussed by numerous authorities (Pickering, 1974; Veith, 1990). In the Crimea, Nightingale nearly died from an episode of Crimean Fever, a condition which probably would be termed typhus today. However, Nightingale had had an extensive history of ill health extending from childhood along with reclusive behavior (Cook, 1913).

On her return, Nightingale was described as emaciated, nauseated at the sight of food and suffering from insomnia (Cook, 1913; Cope, 1958). These symptoms persisted to a greater or lesser extent until the August 11, 1857 collapse. After that
time, Nightingale never perceived herself as well and regulated her activities accordingly.

Theories as to the nature of her illness have ranged from psychosis to a debilitating rheumatoid disease such as systemic lupus erythematosus (Allen, 1981; Pickering, 1974; Veith, 1990). Whatever the truth, it is clear that Nightingale was able to use this situation to her advantage.

Nightingale's correspondence frequently conveys to others her own perceived status of her health. It was common for her letters to start with statements such as, "in response to kindly asking after my health - I am an incurable invalid, entirely a prisoner of my bed (except during a periodical migration)" or "I am sorry not to have time or strength to write more by this mail" or "I have been unfit to do anything--and am still--but what was absolutely necessary --from illness" (Veith, 1990, pp. 83-84).

While she was in ill-health, Nightingale was able to control her environment much more completely than when she had perceived herself as well. She confined herself to one room, allowing that she would only see one visitor at a time, and only on her bidding. She was able to control the extent and frequency of the interactions with her family, especially her mother and sister. Aunt Mai, her father's sister, moved to London specifically for the purpose of caring for Nightingale.

In spite of her invalidity, Nightingale continued to be productive. Descriptions of her work area typically place Nightingale on a reclining couch surrounded by bluebooks, correspondence and cats (Cope, 1958).

The amount of power is the extent of power. This is the net increase in the probability of getting a specific action of outcome.

The amount of Nightingale's power rose rapidly as her fame grew in the Crimea. It declined slowly over the years, still having not diminished completely. It
is the determination of the amount of power which determined the limits of her productive years.

An early demonstration of the amount of her power came on Nightingale's return from the Crimea when she was summoned to Balmoral for an interview with the Queen and the Prince Consort. It was the increase in the power of her name which caused this to occur.

Even Nightingale, however, had doubts at this early stage as to what she could accomplish. She expressed her concerns as to how she should approach the royal couple in a letter to Colonel John Henry Lefroy who had been responsible for getting her authority established in the Crimea. In it she stated:

> Now, should I not cut myself odd from all chance of ever obtaining employment in the Military Hospitals by suggesting the necessity of any great reform to my Magnates three now? It is certain that I should, if any of the Army Medical Magnates were to have a scent of it.

> Would it not be better for me to ask directly & humbly for a Female Nursing Department in the Army Hospitals, which I have little doubt the Queen would grant, without making myself more obnoxious that I am, - or should I state boldly the whole case at first?

> Should you say that I had better keep myself to the objects pointed out by the Nightingale Fund, I should like to be allowed to say before you the reasons which convince me that, with the buzz-fuzz about my name at present, which is against every condition of success, I had better have nothing to do with that for some time.

> ...If I could find a mouth-piece, not obnoxious to the same hostility which the Army Surgeons naturally feel towards me... I would gladly give every suggestion that has occurred to me to be worked up & promulgated for the benefit of the Service (August 24, 1856).

This is a particularly telling letter in that it indicates that Nightingale is very much aware that she is going to be able to enjoy the accomplishment of her goals only through the direct efforts of others applied on her behalf.

She also appears to be very aware that the recognition which her name brings may not always work to her benefit. This indicates that she was not certain of the amount of power which she was able to wield. In spite of her uncertainties, she must
have had confidence in her own abilities as she indeed did boldly state the whole case and won on every point.

It is arguable that Nightingale's name continues to wield power. While the lay notion of her accomplishments is often distorted and incomplete, most are able to identify her.

In the case of Nightingale, range and extension, as constituents of power, are closely related and will be discussed together. Range is the scope of resources or opportunities in which the power relationship may be implemented. Extension is the set of individuals or groups over which the instigator had power.

In both instances, it would appear that Nightingale clearly understood these constituents of power and availed herself of them as necessary. Nightingale had little formalized power over individuals. She did, however, cause people to have an affinity with her causes and thus a loyalty to her. In some cases, as with Sidney Herbert and John Sutherland, this lasted over a period of years. In Herbert's case, it literally lasted to his death bed. For others, the loyalty to Nightingale and her causes was more a passing fancy. This was particularly true in her relationships with women.

Woodham-Smith (1953) accuses Nightingale of using people. She states that this went to such an excess in the case of Sidney Herbert that Nightingale actually drove him to an early grave. This was supported by Smith (1982) who portrayed Nightingale as evil and self-serving.

The records and correspondence do not appear to support the latter point of view. Nightingale drove no one harder than herself. While she may have used her invalidity to her advantage, she also seemed to have legitimately suffered from exhaustion and malnutrition because of the excessive, self-imposed workload.
Nightingale was fully aware that she needed to enlist the support of others in order to achieve her goals. This was particularly true of her relationship with Lord Panmure who had the ultimate responsibility for establishing the Royal Commission on the Health of the Army. Without his at least tacit support, the Commission could not be established.

Because of her expertise, Nightingale felt that she was in the best position to suggest the membership of the Commission, an area that really was out of her purview. However, at the conclusion of the negotiations with Panmure, it is clear that he had conceded on almost every point.

In private notes kept by Nightingale, she indicated that she clearly felt that the victory was hers following the interview. It also indicates the depth of intrigue which she was willing to implement:

Have a tough fight for it: Dr Balfour as Secretary. Pan amazed at my condescension at naming a military doctor; so I concealed the fact of the man being a dangerous animal and obstinate innovator. Failed one point. Unfairly. Pan told Sir J. Clark he was to be on. ...Agreeable to the Queen to have him - just as well to have Her on our side (November 16, 1856).

Of the final list of the nine members of the Commission, eight were sympathetic to Nightingale's cause. She had also succeeded in preventing membership being offered to Sir John B. Hall, the physician who had staunchly refused her admission to the Barrack Hospital in the Crimea and who continually opposed her reforms. Shortly after this, Dr. Hall died, feeling that he had lost all influence because of Nightingale and her supporters (Cope, 1975).

It is of interest to note that when the final instructions for the Commission were set and ready to be submitted to the Queen for her signature, Lord Panmure felt obligated to travel to Nightingale's suite at the Burlington Hotel to seek her approval (Cook, 1913).
The final constituent of power is cost or the net loss to the individual because power has been exercised. In this area, Nightingale virtually never suffered a loss as the result of power implementation. The ability to come through the process unscathed essentially results from independence. Nightingale was not employed during this period. What she had to lose were the achievement of her goal rather than employment, financial gain or public prestige.

Conclusions

The debate has not centered on whether or not Nightingale was a powerful woman, but rather how she was able to implement power during the productive years of 1856-1872.

Nightingale used the power available to her during these years primarily through the auspices of influence rather than sanctioned authority. She did this without the use of reward power.

The area through which her greatest power was exerted came as a result of her expertise from her experiences in the Crimea. This expertise became the focus of the reforms which she sought to implement. The depth of her work came as a result of the work ethic instilled as part of her deep religious convictions.

Nightingale worked through other individuals--almost exclusively male--who were able to directly achieve the sought after results. She has been heavily criticized for what some see as her use of other individuals. Others view this as the only means open to a woman seeking to implement reform in nineteenth century England.

The results of Nightingale’s power, however, are difficult to dispute. The sanitary reform brought first to the British Army, and later to the subcontinent of India, were remarkable for the improvement in the quality and longevity of life. The
longevity of reform in nursing and nursing education are evident in today's practice.
In the words of Florence Nightingale, "I have done my duty" (Goldie, 1987, p. 89).
CHAPTER VII

SUMMARY, CONCLUSIONS AND IMPLICATIONS

Power has previously been defined as a concept which describes a certain phenomenon present in the environment. This phenomenon has been analyzed as it relates to specific activities of Florence Nightingale from 1856 to 1872.

The purpose of this chapter is to explain conclusions about the power utilization of Nightingale. The relationship of Nightingale and power as well as Nightingale and leadership as a subset of power will be emphasized. The subconcepts of authority and influence will be reviewed. Conclusions drawn from the findings of this study as they relate to leadership in general and nursing in specific and implications for future research will be discussed.

Study Summary

In attempting to analyze the utilization of power by Florence Nightingale from 1856-1872, a basic assumption was made that Nightingale was powerful: that is, Nightingale was able to effectively create change and that there was observable outcome from the change.

Prior to selecting events which were to be analyzed as power acts, a concept analysis was conducted on the concept of power. This provided the parameters which were used in the analysis of power utilization and are described as the constituents of power.

Three events were selected for the analysis. Each occurred during the study years of 1865 - 1872. These events included the reform of the army and the
establishment of the Army Medical School, the establishment of the Nightingale School at St. Thomas' Hospital which represented the formalized establishment of secular nursing education, and the establishment and reform of hygienic standards in India during Britain's colonization of that country.

Study Conclusions

The Constituents of Power

The first study question asked that type of power utilization was demonstrated by Florence Nightingale during the years following the Crimean War from 1856-1872. An analysis of the constituents of power is necessary to make this determination.

The constituents of the power act provide parameters which can be used to measure power in a given situation. These include the source, means, amount, range, extension and cost of power. Sources of power are further identified as having five types which include coercive power, reward power, expert power, legitimate power and referent power.

In analyzing Nightingale's utilization of power relative to the three previously established events, the type of power most frequently and consistently used by her was found to be expert power. Her expertise had developed over the years preceding her productive period when she was able to make many hospital visits in England as well as on the European continent. She was also able to synthesize knowledge from written sources, from her limited training at Kaiserswerth and from her superintendency at Harley Street.

The crystallizing experience proved to be her war experiences at Scutari. It was here that the need for renovation and change was most urgent and she was able to
see the immediate result of her nursing and administrative skills. It is also probable that it was during the Crimean War that she began to believe that she could render long-term change through the political contacts with whom she knew and associated.

Concrete evidence of her expertise in public health issues lies in the statistical arguments which she created to emphasize her points relative to the reorganization of the Army Medical School and the need for sanitary reform in India which occurred following her return from Turkey. Recognition of Nightingale's statistical abilities came as she was asked to become a fellow of the Royal Statistical Society and an honorary member of the American Statistical Association.

The development of modern nursing education by Nightingale is also evidence of her expertise. Nightingale, on returning from the Crimea, was determined to seek Army reform. She was pressed, however, to devote at least a portion of her energies toward developing a nursing education model which was to be financed by the Nightingale Fund. She was tapped to do this because of her recent nursing experiences and the success which she had had in reducing soldier mortality.

The least used source of power used by Nightingale appears to be referent power. She was opposed to basing reform on her heroine status. She actively recoiled from public appearances, making none after her return from the Crimea. This is to be distinguished from instances in which she allowed, and perhaps even promoted, the association of her name with projects in which she considered herself to be the authority on the subject. Such an example would be the establishment of the Royal Commission on the Health of the Army.

Of the additional constituents of the power act, the means of power available to Nightingale seems of most relevance. The first was her name recognition and her heroine status. As indicated above, she allowed her name to be used to promote
projects of which she approved. Perhaps a more subtle variation of this was the behind the scenes negotiating carried out on behalf of Miss Nightingale. This was particularly evident in the establishment phase of the Sanitary Commission on the health of the Army.

The means of power which provided Nightingale with the most control over her situation was her health. She had developed a pattern since childhood of becoming conveniently ill when she wished to not participate in family activities. Although there is evidence of periods of legitimate illness which included the wearing of leg braces for a short period and the development of contagious diseases such as measles, her episodes of physical collapse and long periods of being bedridden allowed her to control the environment and the events which surrounded her.

Similar to her health status was the manner in which she played on the expected feminine role in Victorian society. A more complete discussion of this aspect of Nightingale's utilization of power can be found in the section on motivation and power utilization.

Authority and Influence

Authority and influence have been defined for the purposes of this study to be subconcepts of power. Both were demonstrated by Nightingale.

Nightingale utilized formalized authority for very limited periods. Her authority arose from the formalized positions in nursing administration which she held and included her superintendency at the Institution for Gentlewomen in Distressed Circumstances from August, 1853 through October, 1854, and the superintendency of Nurses of the English Hospitals in the East during the Crimean
War from October, 1854 through July, 1856. While she was able to implement change through her positional authority, this change was limited to the immediate situation and time. Lasting social effects were not the result of her use of formalized authority.

The use of influence proved to be the mode through which Nightingale was able to effect lasting change. Her authority ended with the conclusion of the Crimean War. Never again was she in a position of formalized power. The influence of Nightingale came as a result of her expertise in the knowledge gained through her war experiences and was carried out directly through others who were in a position of formalized authority.

Power and Resistance

Power has been defined for the purposes of this study as the ability to achieve a desired outcome despite resistance. Further, it was stated that the strength of the power is measured by the strength of the outcome. The strength of the outcome is equivalent to the strength of power minus resistance.

Outcome for Florence Nightingale was the amount and degree of change which she was able to create in the areas of public health and hygiene which included the establishment of formalized nursing education and services.

A corollary to this definition could be established that the degree of resistance also can be a determinant of the degree of power which is present in any situation. Further, it could be asked as to what type and degree of resistance Florence Nightingale experienced while attempting to make her proposed changes. It appears that Miss Nightingale experienced resistance which was both active and passive.
Active resistance is that which is applied knowingly in a situation by individuals or groups in order to prevent or reverse a given outcome. Initial active resistance to Nightingale's plans for reform came from Dr. John B. Hall, chief medical officer in Scutari.

At the time that Nightingale arrived in Scutari, the Barrack Hospital was strained under the load of wounded who had arrived following the battle of Inkerman. Nightingale and her nurses were appalled at the conditions which included a lack of food, clean water, medical supplies and beds. She assessed this situation as being at least partially the responsibility of Dr. Hall. During Nightingale's tenure, she also challenged Dr. Hall's authority as it compared to her authority to direct the activities of the nurses.

In a telling letter to his wife, Dr. Hall expresses his frustration over the power he perceives Nightingale and her friends to have. The issue at this particular juncture was whether or not nurses brought to the Crimea by the Sisters of Charity should be under Nightingale's control:

I am quite prostrated, as the General Order, procured by mendacity has deprived me of the only real nurses we have ever had, for Mrs Bridgeman, a very superior and conscientious person, the Mother Superior of the Sisters of Charity, has positively refused to acknowledge Miss Nightingale's authority, and I cannot blame her after what is past, and they will go home on Sunday next. Thus the Government loses the free services of these estimable women, and the soldiers the benefit of their ministration, to gratify Miss Nightingale.

I was told, when I declined to interfere, that right or wrong, Miss Nightingale's friends were powerful enough to carry her through. My reply was 'So much the greater pity.' (Cope, 1958, p. 55).

At the conclusion of the war and at the establishment of the Royal Commission, the position of the Director-General of the Army Medical Service became available. While it was widely assumed that Hall would be appointed, Miss Nightingale actively lobbied against this position as she felt that Hall would openly oppose her reforms. An agreement was reached with Lord Panmure that such an
appointment would not be made. Ultimately, Dr. Thomas Alexander, Miss Nightingale's candidate for the position, was appointed Director-General. Although Dr. Hall was allowed to give evidence before the Royal Commission, he never held another official appointment and died in 1866 after retiring on half pay to his residence in Italy (Cope, 1958).

However, even though Dr. Alexander had Nightingale's favor, the following letter to Sir John McNeill demonstrates her displeasure at not being consulted regarding appointments to the Army Medical Service Advisory Board which saw revision as a result of the reforms of the Royal Commission. This remains another example of Nightingale's ability to organize from behind the scenes and to agitate when people did not conform to her standards of behavior:

I want to put you in possession of the facts regarding the Army Medical Board (of which you were the original inventor and which Alexander has cruelly mangled)—Alexander goes and surreptitiously (without saying a word to Mr Herbert recommends two of his creatures to General Peel who are forthwith appointed so the Board is nothing now but one more of the hugger-mugger boards of Andrew Smith's plus Balfour. I hear that Alexander is heartily ashamed of himself. But it is too late now (March 24, 1859).

Lord Panmure provided his own form of resistance to Nightingale's plans. Panmure was not an advocate of having the Commission established. His view was that it would raise unnecessary controversy, a situation which Panmure felt to be intolerable. He applied resistance by simply doing nothing. Sir Benjamin Hawes led the opposition to reform and supported Panmure's inactivity (Cook, 1913; Cope, 1958; Huxley, 1975).

Nightingale countered Panmure's approach by threatening to publish her own account of the activities of the Army Medical Department in the Crimea at her own expense (cited in Chapter VI). Additionally, private reports on the army were sent to Parliament by Colonel Alexander Tulloch and Sir John McNeill which laid blame at
the foot of the army Commissariat and general errors in the systems of conveyance and provisions (Cope, 1958; Huxley, 1975).

While Nightingale did not assist in authoring this report, she was aware of its content and urged the government to recognize its validity. Her route to inform Parliament of her wishes was through Sidney Herbert who addressed the House of Commons on McNeill’s and Tulloch’s behalf. In the face of this evidence, Panmure signed the warrant for the establishment of the Commission.

In each of these instances, there is evidence that Nightingale encountered resistance to her proposed reforms. With what appeared to be nearly mathematical precision, she was able to counter this resistance and move toward her goal. This ability appears to arise from her knowledge of the situation, her staunch belief in that what she was doing was the right thing and the loyalty of purpose which she demanded from her supporters and associates.

A much more difficult situation for Nightingale to deal with was passive resistance offered to her goal attainment. This is represented by the power of social tradition and the perceived role of women in nineteenth century Britain.

During her formative years, Nightingale had impressed upon her by her mother the proper role of the woman in society. Frances Smith Nightingale was very conscious of her social position and worked relentlessly to see that her daughters would have the social skills which would result in a satisfactory marriage. At an early age, Florence began to react to her mother’s need for social prominence and wrote, "I craved for some regular occupation, for something worth doing instead of frittering time away on useless trifles" (Woodham-Smith, 1953, p. 9).

In 1844 after Nightingale had decided that nursing was the path which her service to God should take, her family recoiled at the idea. This was based on the
perception of the lay nurse which has been represented by the characters of Betsy Prig and Sairy Gamp in Charles Dickens (1843) *Martin Chuzzlewit*. These nurses were illiterate, drunken, homeless, and frequently supported themselves through prostitution. This perception of a nurse was certainly not appropriate for a lady with standing. The result was frequent verbal battles with her mother and sister. As an end result, Florence became independent when she moved to the Burlington Hotel in London, stating that she could no longer live in the same environment with her mother. Her move was supported by her father who offered her financial independence through the maintaining of a £500 allowance per annum.

Social mores also prescribed that ladies did not work. As a result, Florence took the position of Superintendent at Harley Street without pay in order to discourage the rumor that she was "entering into service." This was carried through after her Crimean service to be interpreted that women could not address Parliament. The solution came when Miss Nightingale was able to effectively work through others--males--to promote needed legislation.

The same pattern seems to have emerged in dealing with passive resistance as did with active resistance. Miss Nightingale was able to measure the impetus required to overcome the obstacle in order to meet the goal. As a result, she was able to maintain her power base.

**Nightingale and Leadership**

For this study, leadership has been defined as a particular type of power relationship in which one or more members of a group are recognized by the remaining members as being able to move the group toward achievement of goals. This definition implies that mutuality exists between the group members and leaders.
at least to the extent of goal determination. In relation to Florence Nightingale, the question must then be asked as to whether or not Nightingale exhibited leadership as part of the power acts which she exhibited as part of her goal achievement in relation to the reform of the Army Medical School, the establishment of nursing education at St. Thomas' Hospital and the reform of hygienic standards in India.

The evidence seems to suggest that the goals which Nightingale achieved were personal goals and not those established by an aggregate or following. This is not to imply that these goals did not serve the public good, have not had a lasting effect both in the area of public hygiene and sanitation as well as nursing education, and may not have occurred as they did had Nightingale not exhibited power during the post-Crimean years. However, there does not appear to be any correspondence or other evidence which suggests that the goals were developed by any one other than Nightingale. While she did discuss strategy in goal attainment with others such as Sidney Herbert, John Sutherland, and John McNeill, the direction of her potential outcome was not a point of discussion.

Burns (1978) states that the ultimate form of leadership is moral leadership. Nightingale does appear to have been driven by moral goals. However, these again were personal goals in attempting to satisfy her relationship and commitment to God rather than to a group of followers. Through her faith, she sought perfection. In 1846 she wrote to her Aunt Hannah Nicholson:

Life is no holiday game, nor is it a clever book, nor is it a school of instruction not a valley of tears--but it is a hard fight, a struggle, a wrestling with the Principle of evil, hand to hand, foot to foot--every inch of the way must be disputed (Widerquist, 1992, p. 51).

This passage tends to emphasize the intensity and the personal relationship through which she saw as her relationship with God. Through personal perseverance, one could attain goals and perfection. Although she sought to improve
the character of individuals and the health of society, this was a personal objective, 
not one mutually agreed upon by a group.

The force of her power combined with what appears to be the lack of 
leadership may most clearly be demonstrated in the development of modern nursing 
education at St. Thomas' Hospital. Nightingale was urged into the development of a 
school of nursing through public sentiment. The reputation of her accomplishments 
in the Crimea had made her a heroine and had brought nursing to the public forefront. 
What she had accomplished as an English gentlewoman might be something which 
other women would be able to do with proper training and with the establishment of 
the proper environment.

Nightingale's goals, while wishing to establish a school, also revolved around 
the opportunity to develop an appropriate hospital design for the new St. Thomas'. 
In accepting St. Thomas' as the site, she also accepted compromises relative to 
nursing education such as the hired matron, in this case Sarah Wardroper, would have 
absolute control over the education of the probationers. She also agreed that the 
students could be used to supplement hired staff. This created the apprenticeship 
approach to nursing education in which Nightingale did not believe, but which 
existed as the primary form of education in this country until 1960 and in England 
until 1990. Had an advisory group been formed with Nightingale as the leader with 
the stated goal of developing nursing education, the outcome may have been very 
different than what the history of nursing education now tells us.

Most likely to have happened would have been the elimination of the 
apprenticeship form of nursing education which evolved into the diploma type of 
nursing education. Nightingale firmly believed in both clinical and theoretical 
components of education, stating:
I do not treat pneumonia, I treat the person who has pneumonia. This is the reason why nursing proper can only be taught by the patient's bedside, and in the sick room or ward. Neither can it be taught by lectures or books, though these are valuable accessories, if used as such; otherwise, what is in the book stays in the book (1949, p. 24).

Nightingale did not support hospital intervention in the educational process. This came about in spite of her beliefs because of the lack of attention paid to the Nightingale School in the early years (Baly, 1988). Her time was occupied with the development and implementation of the Royal Commission.

Evidence also exists that Nightingale took a paternalistic approach to nursing students, believing that she knew what was best for them and that she must protect them. The primary example of this attitude exists in the establishment of the nurse's home as part of the environment for the probationer.

Baly (1986) sees the nurse's home as a social system within itself. The nursing students ate, slept, studied, prayed and played together. Ostensibly this was designed to keep the students safe from dangerous outside influences. In fact, the result was to isolate the students, deprive them of privacy and develop a culture peculiar to nursing schools.

The nurse's home also contributed to the atmosphere of absolute obedience and conformity which existed from the development of modern nursing education. This has affected the public perception of nursing and has not allowed nursing to develop though the use of creativity and the value of advanced education. Rather, this has come very slowly with the advancement of the women's movement during the latter part of the twentieth century.

It would appear by definition that Nightingale could not be considered a leader in the transformational sense. Transformational leadership "occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality" (Burns, 1978, p.20). This
definition implies that a relationship exists between the leaders and the followers in order to achieve a commonly shared goal.

Power is the means by which a leader has the capacity to achieve needed change (Barker, 1992; Burns, 1978). Power also implies that a relationship exists between the follower and a leader. However, raw power is negative and does not imply that a mutual goal has been achieved.

Evidence does not appear to exist that Nightingale worked in a transformational sense to lead and empower nurses. Her goals, while considered by many to be admirable, were personal, driven by a spiritual need to fulfill what she termed her "calling" (Nightingale, 1949).

The nursing literature relative to power seeks to define the concept, how to obtain power and how to relieve a perceived state of "powerlessness" (Barker, 1992; Diers, 1978; Kalisch, Munn, 1976; Smith, 1989). Although Nightingale is commonly recognized as the founder of modern, secular nursing, the tools which Nightingale herself possessed were not passed on. Nurses were not empowered.

While some of the fault probably lies in cultural change and slow concurrent development of the Women's Movement, Nightingale possessed all of the necessary skills and knowledge to begin to create greater change than what is found in the early history of nursing. It is possible that Nightingale did not find others who she believed to be her equal and capable of carrying this forward. It may also represent the fact that nursing was of secondary importance, giving it her undivided attention only after her power and name recognition had waned and those who she used to help her seek and get reform had died. In a sense, nursing suffered from Nightingale's occasional benign neglect.
Motivation for Utilization of Power

Identifying the types of power used by Nightingale during a given event is a reasonably straightforward procedure. However, attempting to examine the motivations behind Nightingale’s utilization of power allows insight into her complex nature and understanding as to why she employed certain techniques while ignoring others.

Two of the characteristics which she used in order to gain her personal goals were her state of health and her gender. These also seem to have a relationship to her intensely religious nature and appear to have developed from her very early years.

Nightingale’s early life was marked by tumult and family discord. Most of this centered around her mother and sister with whom she held little in common. Frances and Parthenope were content to solve domestic problems and do embroidery, refusing to enter into the intellectual arena. Florence wanted none of this. She was able to isolate herself from her mother and social duties by feigning illness. When this did not solve the problem, she resorted to tantrums, a method which nearly always brought positive results. Fanny lamented to her friend Elizabeth Gaskell, "We are ducks who have hatched a wild swan" (Woodham-Smith, 1953, p. 81).

These techniques seemed to propel Nightingale into the world of men. First, she sought refuge with her father who willingly provided her with a typically upper class male education including the languages, the classics and mathematics. During the Grand Tour, she sought the company of the current day intellectuals and philosophers, most of whom were men.

Nightingale continued to have difficulty in establishing relationships with women as she tended to feel them intellectually subservient and unable to understand
her philosophy. Although she knew some of the intellectual women of the period such as George Eliot and Harriet Martineau, none developed close or lasting relationships with Nightingale. Instead, she turned to men in similar positions in which she found more comfort.

An additional factor is revealed in Nightingale's diaries in which she identifies that she viewed herself as unusual or odd, feelings which extended from very early adolescence (Cook, 1913; Pickering, 1974; Woodham-Smith, 1953). She perceived herself to be a monster and felt that at any moment she would be found out. These feelings were probably perpetuated by her mother who frequently expressed concern that Florence did not fall into the appropriate Victorian lady's mold (Allen, 1981). It would appear that Nightingale sought to combat what she felt to be her weaknesses by combining knowledge, mastery of a subject and power. This agrees with Moers' (1976) perception of Nightingale's motivations and needs.

Showalter (1981) posits that poor relationships with women in her family is also demonstrated in Nightingale's religious fervor. She states that Nightingale saw God as strictly masculine who had sanctioned her choice to be productive. Eventually, at the second calling on May 2, 1852, she describes that God called her to be a "savior." This motivated her to leave home and gain experience in the nursing realm. She saw herself as an agent of this masculine God who justified her rebuke against feminine morality of domestic duty and self sacrifice. Showalter (1981) also points out that Nightingale's struggles were occurring concurrently with a massive struggle within the Church of England. This centered on the role of women which challenged basic ideals in Victorian life such as family structure, the role of the patriarchal church and the right of women to work outside of the home.
This is also revealed in Nightingale's continuous struggle with the Roman Church and religious orders. On several occasions, Nightingale sought to train or potentially enter a religious order as refuge from the family discord. Each time, the opportunity passed without completion (Cook, 1913; Woodham-Smith, 1953). While some viewed convents as a route which would give women a degree of autonomy and family, Nightingale tended to see them as organizations which made the woman subservient to the male priesthood and the patriarchal nature of the church.

Some of Nightingale's religious frustrations appear to have been vented by the writing of Suggestions for thought to searchers after religious truth. Although this work in three volumes was privately published in 1860, Nightingale started this work as early as 1852 during a period of particularly deep family turmoil and personal depression. Although very few copies remain of this extensive work, one portion, the monograph Cassandra which expresses most clearly Nightingale's views on feminism, did find its way to general publication.

Nightingale rejected marriage on similar grounds. Her most serious suitor, Richard Moncton Milnes, was an intellectual and political reformer of the period who shared many of the same ideas and values as Nightingale. However, although she wrote in her diaries on a number of occasions that she found him to be an interesting and purposeful suitor, she viewed marriage as consuming and a life in which she would spend her time arranging things for the convenience of her husband as opposed to her own goals. This was clearly stated in a diary:

I have an intellectual nature which requires satisfaction and that I would find in him. I have a passionate nature which requires satisfaction and that I would find in him. I have a moral, an active, nature which requires satisfaction, and that would not find it in his life. ...I could not satisfy this nature by spending a life with him in making society and arranging domestic things (1849).
These characteristics of Nightingale's development appeared to have led to what Showalter (1981) calls a peculiar feminism. Feminist theory calls for the reconciliation of goals and needs with one's mother and sisters (Frye, 1983; Scott, 1988; Smith-Rosenberg, 1975). This is not congruent with Nightingale's experience. Allen (1981) posits that turning to nursing is a logical outcome of this situation as it allowed her to express her maternal feelings for those whom she cared directly and indirectly. Nightingale refers to the soldiers in the Crimea as her "18,000 children" saying that she was able to act more like a mother to them in one week than her own mother had been able to extend to Nightingale in all of her first thirty-seven years (Cook, 1913).

Power, which was achieved through the development of expertise, allowed Nightingale control—something which she did not experience as a child or young adult. Nightingale was critical of women around her, saying that they were not her intellectual equal and consequently probably resulted in the poor relationships which she was able to develop with women. Perhaps the real irony is that in her writings, Nightingale predicted in Cassandra (1852) that the next coming of Christ would be as a female, one, "who will resume, in her own soul, all the sufferings of her race" (p. 53).

Study Implications for Nursing

The scope of this study has provided a look at Nightingale's utilization of power during three specific events which occurred between the years of 1856-1872. Because Nightingale is first and foremost recognized as a nurse, implications of Nightingale's utilization of power as it relates to nursing should be examined.
When reviewing Nightingale's accomplishments in nursing, it should be remembered that Nightingale should be remembered as a nursing administrator and reformer. Relative to the reform of nursing, she wrote:

The whole reform of nursing both at home and abroad has consisted of this: to take the power over nursing out of the hands of the men and put it into the hands of one female trained head and make her responsible for everything (regarding internal management and discipline) being carried out (Baly, 1981, p. 213).

In seeking to implement Nightingale's reforms, the most significant changes came in hospital nursing in which she saw a need for a contingent of intellectual, well educated women who would put the care of the patient above other personal needs. This care was to be given in spite of the religious orientation of the patient or his ability to pay. Primary to achieving this reform was the establishment of organized nursing education.

Nightingale conveyed to the directors of the Nightingale school her basic wishes in terms of curriculum and practical experience. What was even more strongly conveyed was the need to protect the student and to see that they conducted themselves within the bounds of moral standard.

Following graduation of students, Nightingale frequently followed the careers of those she thought to be the best qualified to assume posts in nursing administration. The Nightingale School became the major institution for the training of nursing matrons (equivalent to head nurses, supervisors, and directors, dependent on the size and the location of the nursing institution).

Nightingale also saw nursing needs which existed in the community. Therefore, she established district nursing and health visiting, comparable to public health nursing and visiting nursing of today. This emphasized the fact that
Nightingale saw nursing as functioning not only in the acute care, or illness setting, but also in disease prevention and rehabilitation settings.

Nursing has continued to experience problems from the time of its Victorian origins, however. The question remains as to whether or not the blame for these difficulties lie at Nightingale's feet.

Curriculum systems for nursing education came to be known as the "Nightingale model." It would appear that many of the problems which exist with the Nightingale model exist not because of it, but rather because little attention was paid to Nightingale's original wishes.

Most significant in this area is the apprenticeship system which evolved for students. In return for service given for little or no pay, the student received a "free" education. In fact, the result was that the nursing schools became dependent on the training hospitals for financial resources. Consequently, the hospitals began to control training schedules, frequently limiting time and experience in the classroom in favor of the manpower hours which could be garnered at little or no expense to the institution.

Nightingale envisioned a different method of financing the student experience. The Nightingale Fund made the Nightingale School financially independent of St. Thomas' Hospital. This allowed the school to independently set educational standards and independently hire nurse educators. Recommendation to change the apprenticeship method in English nurse training came as early as 1890 (Baly, 1981). In this country, similar systems came under attack shortly after the turn of the century. However, real renovation was not achieved until the 1960s in the United States and the 1990s in the United Kingdom (Clay, 1987).

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Blame for this situation may come from lack of transformational leadership on Nightingale's part as opposed to poor direction or guidance. This represents the low priority which nursing took when she was attempting to create social reform. Responsibility for the development of curriculum was given to Mrs. Wardroper and heavily influenced by Mrs. Bedford Fenwick (Hector, 1970). By the time Nightingale really became cognizant of the errors in structure which had been made, it was difficult to impossible to rectify the already well-established system.

Nursing continues to suffer with problems of public image. In a volume by Etzioni (1969) which examines the status of teaching, social work and nursing, the conclusion is drawn that these occupations can never enjoy the same status of medicine, law and theology. Rather, these roles should be known as "semi-professions." Etzioni states that this is appropriate because of shorter training, less legitimized status, decreased right to privileged information, less of a specialized body of knowledge, and decreased autonomy from supervision when compared to the recognized professions. Further, he argues, nursing aspires to the status of profession even though nurses are aware that they do not objectively deserve such status.

This argument is continued by Katz (1969) who states that nurses are of a lower status than true professionals because they do not determine the kind of knowledge which is primarily used in the health care setting; rather, nurses are merely purveyors of this knowledge. He adds, "traditional hospital arrangements that makes the nurse subservient to physicians but autonomous in regard to nurturant care is a viable system" (p. 76).

While the Etzioni and Katz arguments are dated and do not reflect the current state of nursing education, research or responsibilities in primary care, it does
demonstrate the image problems with which nursing has had to deal over the last century.

A direct correlate to these perceptions can be drawn from the need which Nightingale saw to "take care of nurses," assuming that they were not capable of taking care of themselves. Had nursing not evolved in such a controlled setting where subservience was the expected norm, the potential of nursing practice might be more evident today.

In a further exploration of this theme, Muff (1988) states that nursing has fallen into a pattern of "nightingalism"—the philosophy of the handmaiden nurse based on the ethics of altruism and socialism. She states that these are the compassion traps which serve to abrogate nurse's rights. While this may reflect the radical feminist perspective, it serves to highlight the ongoing dichotomy between potential and reality. This may be considered to be the Nightingale legacy.

Bennis and Nanus (1985) posit that the wise use of power is the empowerment of the followership. It can be hypothesized that this would be a difficult to impossible task for Nightingale, especially as it relates to nursing because of the cultural context of Victorian society.

At the establishment of the Nightingale School, certain rules for acceptance into the school were established. This included the fact that the most desirable applicants came from a class of women who were used to earning their own employment and who exhibited such educational requirements as being able to read. While Nightingale would have preferred "ladies," the type of individual drawn to nurse training generally came from those who had been in service in a Victorian home.
To empower nurses, then, would involve empowering a group of people who had little to no experience in decision-making and who had had limited educational experience. While Nightingale can be criticized for her lack of leadership, cultural norms must be examined as part of the answer as to why this occurred.

The work by F. B. Smith (1982) presents Nightingale in an entirely different light than other authors. In the first sentence, he declares Nightingale to be manipulative. Throughout the volume, he attempts to show her as unbalanced, constantly attempting to justify her behavior with her family and to act in a God-like fashion. Smith states that she could not have had the deep religious beliefs because she neither attended church services nor regularly received the sacrament of communion.

Smith agrees that Nightingale exhibited a substantial power base. He also agrees that probably her greatest and most lasting achievements came after the Crimean experience and included the reform of the Army, the establishment of the school at St. Thomas' and the implementation of hygienic standards in India. What appears to be in question is her motivation.

This author cannot draw the same conclusions as F. B. Smith. It is clear that Nightingale worked through people, at times probably "using" them in order to achieve her goals. The most obvious example of this behavior was with Sidney Herbert and continued late into her life with others such as her brother-in-law Sir Harry Verney. However, the existing letters and diaries to not support the conclusion that the utilization of power was for the purposes of self aggrandizement. To the contrary, the correspondence seems to indicate a profound religious motivation, all be it unconventional by Victorian standards.
It would appear that Smith has attempted to review the Nightingale papers and biographies without applying the notion of cultural norm, which would be distinctly different at the time of his writing in 1980 as opposed to a century prior. There also appears to be evidence of bias at the outset of the project. A first sentence which reads, "Florence Nightingale's first chance to deploy her talent for manipulation came in August 1853" (F. B. Smith, 1982, p. 11) does not lead the reader to the conclusion that the work is unbiased.

Smith does put forth the notion that many of the works which describe Nightingale's life have a hagiographic tone. This cannot be denied and gives evidence to her heroine and saint-like status which was conveyed to her following the Crimea by the British public. O'Malley (1934) and Wintle (1920) both carry this theme. It is continued in children's stories about Nightingale such as in Bull (1985), Webb (1958) and Leighton (1958). However, Nightingale should not bear the faults of her biographers. Sufficient primary evidence exists to allow for study and to have conclusions drawn from these documents.

Study Implications for Leadership

In a previous section, leadership has been defined as a particular type of power relationship characterized by a group member's perception that another group member has the right to prescribe behavior patterns for the former regarding his activity as a group member (Janda, 1960, p. 358). While it has already been discussed that Nightingale probably did not function as a transformative leader, case studies such as this do contribute to the leadership literature. This discussion also has implications for answering the second study question relative to the lasting effect of Nightingale's utilization of power.
Janda (1960) identifies that studies of leadership had traditionally taken two approaches: trait and situational-interactional. While Nightingale did have certain factors and motivations which have already been discussed which urged her into a situation where she needed to take control, and thus exert power, it is the contention of this author that the trait approach to the study of leadership and power do not hold up under intense scrutiny.

Bennis and Nanus (1985) call the trait approach the "Great Man" theory (p. 5). In this, the authors state that this approach posits that only a few can lead; all others must be led. "Either you have it or you don't" (p. 5). While this author would agree that Nightingale was a great person in the context that she created significant and lasting change, it seems unlikely that if Nightingale had not existed, or if the opportunity to create change had not existed, nursing would have experienced marked and positive change under other circumstances and leadership.

The situational-interactional approach deals with the environment of the event. This current study provides the information for developing a case study based on Nightingale's experiences and her utilization of power with emphasis on leadership using the situational-interactional approach. Certainly the circumstances which surrounded her ability to function in the Crimea and later the political realities with which she had to deal in order to achieve goal accomplishment represent an ideal medium for an in-depth look at a leadership situation which had power as its base.

This approach is supported by Janda (1981) who quotes Thibault and Kelley:

It is our opinion that leadership will be most fruitful when it adopts an indirect and analytical approach to the task. Rather than going directly into the complex phenomena and surplus-meaning-laden terminology encompassed by the term leadership, research must first be directed toward clarifying problems of power structures, norms and goals, task requirements, functional roles, etc., each of which is complex and challenging enough in its own right. In short,
an understanding of leadership must rest on a more basic understanding of the structure and functioning of groups.

Further, Janda adds, "And this paper urges an approach to leadership which draws upon a basic understanding of power" (p. 360).

Implications for Future Study

Literature relative to Nightingale appears to have proliferated during several periods of time. These include the periods after the Crimean War, after her death in 1910, during the 1950's, and most recently, an upsurge in Nightingalean research since 1990. Recently, Nightingale has been recognized as the earliest nursing theorist which has helped to introduce her ideas to nursing students. However, there appears to be a dearth of research which is conceptually based. An increase in this area would build a historical and a sociological base.

Nightingale appears to have had a most lasting reputation in nursing. However, nursing suffers from a lack of power. While some of this appears to be a continuation of the Nightingale legacy, current studies need to occur which examine how power is utilized by nurses in a variety of positions from staff nurse to nurse administrator; from diploma to doctoral preparation. This would help to identify appropriate strategies for improving power utilization by nurses.

Leadership, as a subset of power, also needs to be examined in nursing. Nursing in the United States as well as the United Kingdom has a rich history of a few individuals who have established the philosophy and practice standards of nursing. In this country, leaders such as M. Adelaide Nutting, Lavinia Dock, Isabel Robb and Isabel Stewart represent the body of individuals who formalized nursing in this country. More recently, Virginia Henderson, Sr. Callista Roy and Martha Rogers represent a new generation of nurse leaders.
However, leadership in nursing needs to be assumed at many levels. Studies of leadership models as they relate to the practice and education of nurses would begin to reveal patterns and deficiencies as leadership relates to nursing. Sociological studies which identify issues such as self image, role identification and organization patterns would help to begin to identify the personality of the nurse.

Bennis and Nanus (1985) quote Bertrand Russell as saying, "The fundamental concept in social science is power in the same sense in which energy is the fundamental concept in physics" (p. 15). It appears to be a concept well used by the founder of nursing.

The negative aspect of Nightingale's legacy is that she did not appear to empower nurses to use power in the same manner as which she did in order to effect change. As nurses struggle with power and empowerment issues, it appears that the mode of effecting change in the future must come through transformational leadership within the profession.
Appendix A

A Chronology of the Life of Florence Nightingale
<table>
<thead>
<tr>
<th>Year</th>
<th>Month</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1820</td>
<td>May 12</td>
<td>Born in Florence, Italy, to William Edward and Frances Smith Nightingale.</td>
</tr>
<tr>
<td>1837</td>
<td>February 7</td>
<td>Experiences first &quot;Call to God&quot; at Embley Park.</td>
</tr>
<tr>
<td>1837</td>
<td>September 8 to April 6</td>
<td>Florence accompanies parents on Grand Tour of Europe which introduces her to social reformers and philosophers of the period.</td>
</tr>
<tr>
<td>1839</td>
<td>April 6</td>
<td></td>
</tr>
<tr>
<td>1850</td>
<td>July 31 to August 13</td>
<td>First apprenticeship at Kaiserswerth, Germany, at the Institution of Kaiserswerth on the Rhine for the training of Deaconesses.</td>
</tr>
<tr>
<td>1851</td>
<td>July ? to October 8</td>
<td>Second internship at Kaiserswerth.</td>
</tr>
<tr>
<td>1852</td>
<td></td>
<td>Writes Cassandra.</td>
</tr>
<tr>
<td>1853</td>
<td></td>
<td>Begins to receive allowance of £500 per annum which allows Nightingale to be financially independent and more independent of her family.</td>
</tr>
<tr>
<td>1853</td>
<td>February</td>
<td>Visits Paris for purpose of visiting hospitals.</td>
</tr>
<tr>
<td>1853</td>
<td>August to October</td>
<td>Assumed superintendency of Hospital for Gentlemen in Distressed Circumstances, Harley Street, London.</td>
</tr>
<tr>
<td>1854</td>
<td>October</td>
<td>Superintendent of English nurses in the East during the Crimean War.</td>
</tr>
<tr>
<td>Year</td>
<td>Month</td>
<td>Event</td>
</tr>
<tr>
<td>------</td>
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</tr>
<tr>
<td>1856</td>
<td>September</td>
<td>Audience with Queen Victoria and Prince Albert at Balmoral for purpose of discussing proposed reform of the British Army medical establishment.</td>
</tr>
<tr>
<td>1856</td>
<td>September</td>
<td>Second audience with Queen Victoria.</td>
</tr>
<tr>
<td>1857</td>
<td>May</td>
<td>Royal warrant for the Commission on the Health of the Army signed by Queen Victoria.</td>
</tr>
<tr>
<td>1857</td>
<td>August 11</td>
<td>Nightingale collapses. Goes to Malvern to receive water cure.</td>
</tr>
<tr>
<td>1858</td>
<td>May</td>
<td>Committee selected to oversee Nightingale Fund.</td>
</tr>
<tr>
<td>1858</td>
<td></td>
<td><em>Notes on Matters Affecting the Health, Efficiency, and Hospital Administration of the British Army</em> published.</td>
</tr>
<tr>
<td>1859</td>
<td></td>
<td><em>Notes on Nursing</em> published.</td>
</tr>
<tr>
<td>1860</td>
<td></td>
<td><em>Suggestions for Thought</em> privately published.</td>
</tr>
<tr>
<td>1860</td>
<td>June 24</td>
<td>Nightingale School at St. Thomas' Hospital opens.</td>
</tr>
<tr>
<td>1864</td>
<td></td>
<td>Works with War Office to establish sanitary reform in Indian.</td>
</tr>
<tr>
<td>1868</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1874</td>
<td></td>
<td>Father, William Edward Short Nightingale, dies.</td>
</tr>
<tr>
<td>1880</td>
<td></td>
<td>Mother, Frances Smith Nightingale, dies at Lea Hurst after being cared for by Florence.</td>
</tr>
<tr>
<td>1895</td>
<td></td>
<td>Experiences continued ill health. Eyesight and memory fail.</td>
</tr>
<tr>
<td>1907</td>
<td></td>
<td>Receives Order of Merit.</td>
</tr>
</tbody>
</table>
1910 August 13

Dies in her sleep in flat on South Street, London. According to her wishes, Nightingale is buried in the family plot at East Wellow close to Embley Park, although there is a public outcry to entomb her in Westminster Abbey. Coffin is conveyed to the burial area by Veterans of the Crimean War.
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