Warning Concerning Copyright Restrictions

The Copyright Law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted materials.

Under certain conditions specified in the law, libraries and archives are authorized to furnish a photocopy or other reproduction. One of these specified conditions is that the photocopy or reproduction is not to be used for any purpose other than private study, scholarship, or research. If electronic transmission of reserve material is used for purposes in excess of what constitutes "fair use," that user may be liable for copyright infringement.

 $\mathbf{21}^{\mathrm{st}}$ Century Hall: Proxemics and Gender Interactions in Contemporary Research.

A thesis submitted in partial fulfillment of the requirements for the degree of

Bachelor of Arts in Speech Communication and the Honors Program

by

Lauren E. Payne

Professor Saralinda Seibert Kiser, Thesis Advisor

UNIVERSITY OF NEVADA RENO

THE HONORS PROGRAM

We recommend that the thesis prepared under our supervision by

LAUREN E. PAYNE

entitled

 21^{st} Century Hall: Proxemics and Gender Interactions in Contemporary Research.

be accepted in partial fulfillment of the requirements for the degree of

BACHELOR OF ARTS, SPEECH COMMUNICATION

Saralinda Seibert Kiser, Thesis Advisor

....

Tamara Valentine, Ph. D., Director, **Honors Program**

May, 2010

ABSTRACT

Nonverbal communication is an everyday occurrence that is unavoidable; such behavior becomes second nature. How we stand, sit, move, gaze and gesture are just a few examples of how messages are sent without uttering a single word. A specific form of nonverbal communication is proxemics – the human use of space. Edward T. Hall (1966) coined this term during the early 1950s, and designed a guideline in his first book for the four zones of space: public space, social space, personal space, and intimate space. Like many other phenomena, gender plays a key role in the functioning of proxemics. The following will take a look at how current research utilizes Hall's proxemic zones to examine the sex differences in proxemic behaviors. Understanding these types of interactions can benefit the development of effective communication between genders and increase self-awareness of individual communication styles. In addition, understanding how space is used when gender is a factor can help individuals initiate and maintain interpersonal relationships.

ACKNOWLEDGEMENTS

A special thanks to my mentor, Professor Saralinda Seibert Kiser, for her dedication to this project and support through all the ups and downs of this year-long process. In addition, I would like to thank my Honors professor and advisor, Doctor Tamara Valentine, for her assistance and guidance during this academic journey. The road has been long, the obstacles great, but the end has been met with achievement and accomplishment.

Table of Contents

Abstract i
Acknowledgements ii
Table of Contents
Introduction 1
Background Information
Nonverbal Communication
Gender & Communication
Proxemics
Literature Review
Intimate Space10
Personal Space
Social Space
Public Space
Analysis & Results
Conclusions
References 20

INTRODUCTION

"Most gregarious animals keep a minimum distance to each other, as when starlings on a telephone wire distribute themselves regularly, just outside beak distance, like pearls on a string."

(Hogh-Olesen, 2008).

Communication – both verbal and nonverbal – is an inevitable phenomenon, a guaranteed human interaction. The attempt to stop talking or stop communicating is an act of communication itself. Nonverbal communication specifically refers to not what is being said, but rather how the messages are sent, the actions behind the words, or the absence of any words at all. This type of communication ranges from how words are spoken (tone, inflection, sarcasm, etc...) to body language cues and gestures. One of the many subcategories of nonverbal communication is *proxemics* – "the study of the human use of space" (Brown, 2001). The quotation at the beginning of this section illustrates how instinctual and natural the use of space is, even for the human race. Proxemics affects the potential for interpersonal communication, and the possibility of initiating and maintaining interpersonal relationships.

Proxemics, the use of space, refers specifically to the four zones of space as designed by Edward T. Hall in his first publication, *The Hidden Dimension* (Hall, 1966). These zones were created as a way to categorize the use of space and to better explain the interactions that occur at each level. Hall's development of proxemics created a foundation for further research of the topic (and related topics) in the years following the

publication of his book in the early 1960s. The research following Hall's significant contribution to the study of nonverbal communication is vast and varied, and reports a number of results and findings. Hall's original research during the 1950s and 1960s focused on space as used by an individual, but with little focus on the variations of proxemics based on the gender of the individual. The potential relationship between proxemics and gender has been one of the many areas of research inspired by Hall's work. What has become of proxemics in more recent research? The use of proxemics to accomplish interpersonal communication and maintain and initiate interpersonal relationships by both men and women in a more current time leads to an important question: is Hall's foundational research still used in current research to examine sex differences in proxemic interactions?

The focus of this exploratory research has been to review more current, relative work that observes the proxemics-gender relationship within the context of Hall's four proxemic zones. Research regarding the proxemics-gender relationship has been gathered and analyzed, focusing on the four specific areas of space: (1) intimate space, (2) personal space, (3) social space, and (4) public space. The specific expectations for this project were that current research would continue to find that women use up less space than men, and women are allowed to violate proxemic rules more often than men. Understanding how space is used, specifically as a factor of gender, can provide more insight beneficial to effective communication. Furthermore, understanding space can help initiate and maintain interpersonal relationships.

BACKGROUND INFORMATION

In order to better understand the relationship between gender and proxemics, knowledge about these two topics, within the realm of nonverbal communication, is important. The following sections will briefly discuss (a) nonverbal communication, (b) gender & communication and (c) proxemics.

Nonverbal Communication

"The eyes of men converse as much as their tongues, with the advantage that the ocular dialect needs no dictionary, but is understood the world over."

- Ralph Waldo Emerson (1860)

Ralph Waldo Emerson's poem "Behavior," from the *Conduct of Life* collection, vividly portrays the reality of verbal and nonverbal communication. While spoken word (verbal communication) may require the language of a dictionary, the unspoken actions of individual speak just as loudly as the words.

Richmond, McCroskey, & Hickson, authors of *Nonverbal Behavior in Interpersonal Relations* (2008), define human communication as "the process of one person stimulating meaning in the mind of another person (or persons) by means of verbal and/or nonverbal messages" (p. 1). Joseph DeVito, author of *Human Communication* (2006) further defines communication as "(1) the process or act of communicating; (2) the actual message or messages sent and received; (3) the study of

the processes involved in the sending and receiving of messages" (p. G-2).

Communication incorporates both verbal and nonverbal elements. Specifically, *nonverbal* communication is the "process of one person stimulating meaning in the mind of another person or persons by means of nonverbal messages" (McCroskey, 2001). Nonverbal communication can be further defined as "communication without words… by means of space [for example]" (DeVito, 2006, p. G-8). Spoken messages, or verbal communication, can be stopped as desired when an individual chooses to stop speaking or conversing.

Nonverbal communication, however, never ceases to exist; the absence of a message is a message itself. The multiple, nonverbal aspects of a message are of extreme importance; these "nonverbal cues are very powerful" and it is not always "what you say... [but] also how you say it" (Nova, 2009). Galliano, author of *Gender: Crossing Boundaries* (2003), defines nonverbal communication as "the link between our inner emotions and our interpersonal communication" (p. 147).

Gender & Nonverbal Communication

The most important consideration to keep in mind when discussing gender is its difference from the idea of sex (biological identity). While sex is the "biological and genetic difference between girls and boys, men and women" (Richmond, McCroskey, & Hickson, 2008, p. 211), gender, in its simplest form, is "the study of human beings as women and men" within a social or cultural context (Galliano, 2003, p. 3). Galliano discusses the importance of studying and understanding gender, how it can be "quite

practical... [because] what you learn can be applied to your personal relationships, family life, and occupational endeavors" (p. 8). The same can be said not only about gender-specific communication, but about all forms of communication, including nonverbal communication, and more specifically, proxemics. Richmond, McCroskey, & Hickson (2008), further define gender as "the psychological, social, and cultural manifestations of what people perceive to be the appropriate behaviors of females and males. These manifestations may or may not be representative of a person's biological sex" (p. 212). This definition proves relevant to the socialization females often receive to be more social and friendly, allowing females to feel less affected by proxemic invasions. However, despite the socialization females receive to be more social and friendly towards others, females generally tend be more restrictive in use of distances, limiting interactions to those with people they know or feel comfortable with, like fellow females (Mehrabian & Diamond, 1971; Hughes & Goldman, 1978; Camperio & Malaman, 2002).

Crawford and Unger (2000), and Hall (1984) all discuss the possibility of females having experienced stronger socialization to be more affiliative and friendly, which is reflected in increased numbers of intimate nonverbal interactions. Compared to women, men need a larger amount of personal space, a bigger personal bubble. In addition to Sussman & Rosenfeld (1978), both Baxter (1970) and Hai, KhalruUa, & Coulmas (1982) observed males' great dislike of personal space intrusion, and a high intolerance for crowded spaces; situations like these tend to result in "fight or flight," the male removing himself from the context or reacting in an aggressive manner.

Proxemics

"Some thirty inches from my nose the frontier of my Person goes, And all the untilled air between Is private *pagus* or demesne. Stranger, unless with bedroom eyes I beckon you to fraternize, Beware of rudely crossing it: I have no gun, but I can spit."

W. H. Auden (1965) "Prologue: The Birth of Architecture"

Edward T. Hall published his book, *The Hidden Dimension*, in 1966. This publication was the first of many and set a foundation for a new realm of communication research. Hall coined the phrase *proxemics* for "the interrelated observations and theories of man's use of space..." (Hall, 1966, p. 1). The realm of space as used by man (referring to both men as women as 'humans') can be broken down into four distinct zones, as defined by Hall. The first zone is the intimate. This zone extends from touching to eighteen inches, the distance of "love-making and wrestling, comforting and protecting" (p. 110). Individuals are highly aware of another's presence and few are even allowed to enter this space. Extending beyond the intimate zone is the personal zone (or "personal bubble"), which exists from eighteen inches to about four feet (p. 112). Hall parallels the idea of this zone to the thought of "a small protective sphere or bubble that an organism maintains between itself and others." The personal zone is commonly used "during conversations with close friends and interactions with relatives" (Richmond, McCroskey, & Hickson, 2008, p. 128). Following the zone that "keeps someone 'at arm's length" is the third zone – social distance. Referred to as the socio-consultive zone by Richmond, McCroskey, & Hickson (2008), the social zone begins at four feet and extends to twelve

feet (Hall, 1966, p. 114-15). Most common for business transactions, conversations between acquaintances, and casual social gatherings, this zone is "the limit of domination" (p. 115). Finally, extending from twelve feet and beyond is the public zone. The extension of this zone, as defined by Richmond, McCroskey, & Hickson (2008), reaches to the "outer limits of interaction potential" (p. 128). Hall (1966) created these four specific zones as a way to classify and organize the use of space. The selection of a specific distance "depends on the transaction; the relationship of the interacting individuals, how they feel, and what they are doing" (p. 120).

The choice of a specific proxemic zone – the area of interpersonal distance and physical distance – "transmits important cues as to an individual's comfort with emotional closeness and the willingness to express it" (Burgoon & Le Poire, 1999). These zones may suggest that "the type of interpersonal relationship in which we are involved affects the distance we place between ourselves and those with whom we interact" (Richmond, McCroskey, & Hickson, 2008, p. 127). The distance between individuals sends specific messages about the relationships maintained within these zones; "people interacting at closer distances are judged by others to have a closer interpersonal relationship than individuals who interact at greater distances" (Wellens, 1978, p. 41).

Shortly after Hall's publication of *The Hidden Dimension*, an increased amount of research began in the field of proxemics. One particular scholar, Nan Sussman, conducted a series of studies that would come to support Hall's findings and strengthen the foundation for future research. Her work is referenced almost as often as Hall's, commonly found throughout the same exact studies that also feature Hall's work. During

the 1970s, Nan Sussman conducted a study to explore proxemic violations via touch, and to see if gender played a role in the justification of the violation. Sussman and Rosenfeld (1978) expected males to experience greater aversion to unjustified touch and spatial violations versus justified touch and spatial violations. Females were expected to not experience aversion to both touch and spatial violations "regardless of justification or occurrence of touch" (p. 223). The study involved both male and female participants who were asked to complete a task while a fellow female student sat at his or her side. This female student played the role of the timekeeper; participants were asked to complete a task within three minutes. The timekeeper sat six inches to the left or right side of the participant; this distance between the timekeeper and participant falls within Hall's first proxemic zone – "intimate space". During the course of the task, the female timekeeper was instructed to keep her hand on the participant's shoulder the entire three minutes. For justified touch interactions, participants were informed beforehand about the timekeeper's hand being placed on the shoulder. For unjustified touch, participants were not informed of this factor. After each participant completed the task alongside the timekeeper, he or she was asked to fill out a liking scale regarding the timekeeper; this scale was used to observe the link between justified/unjustified touch and liking of the timekeeper.

As expected, males were greatly affected by unjustified touch, exhibiting significantly lower performance scores than females, who showed no significant difference in performance. In regards to the participant's impression of the timekeeper after unjustified touch, males showed a higher level of dislike as opposed to females. The most significant finding of this study was the *increase* in liking by female participants

following unjustified touch from the timekeeper. This finding further supports the continuing expectation that women are able to violate proxemic rules more often than men due to socialization. In everyday life, consider how often women are observed as approachable compared to men.

LITERATURE REVIEW

Research has been conducted in a wide range of areas related to the study of proxemics. This project aims to observe how modern research in the 21st century looks at variations in gender interactions within the context of Hall's four proxemic zones, to see if Hall's research is still relevant and applicable.

Intimate Space

The first zone designated by Hall is the intimate zone. As previously mentioned this zone begins at touching and extends to eighteen inches out. Few individuals are welcome in this space and great discomfort is experienced when the space is violated. Crowding in areas of high density can often lead to strangers invading this very personal, protected space. This area is meant only for those who "are emotionally close to us... [such as] lovers, parents... close friends, relatives, and pets" (Pease, 2004, p. 195). Areas of high crowding can include sources of public transportation (buses, trains, subways), waiting in lines at locations like banks, cinemas and grocery stores, and standing close to one another at a concert or party. One of the most common, uncomfortable sources of high crowding, however, is the elevator – this context limits the potential for personal space completely, and more often than not "unavoidable intrusion into another [person's] intimate zone" can occur (Pease, 2004, p. 194). Encounters like these are often brief and limited, however, they can still be incredibly stressful and uncomfortable (Richmond, McCroskey, & Hickson, 2008, p. 127). Furthermore, such situations of proxemic discomfort require that for the time being, discomfort and violation be accepted.

Personal Space

The second area of space, personal space, begins at eighteen inches and extends out to four feet. This realm of space is often referred to as a *personal bubble*. The idea of personal space suggests ownership of the zone, and many are reluctant to share this bubble with others. Personal space is a very important idea to consider when discussing territory and laying claim to the surrounding area. Territoriality, as defined by DeVito (2006), is "a possessive or ownership reaction to an area of space or to particular objects" (p. 143). In regards to proxemics, territoriality is related to the idea of ownership of space, and the discomfort and aversive emotions experienced when personal space and proxemic expectations are breached. Author Marge Piercy (1973) provided a classic description of spatial differences between men and women in her observation of the two genders interacting in a theatre setting:

"Men expanded into available space. They sprawled, or they sat with spread legs. They put their arms on the arms of chairs. They crossed their legs by putting a foot on the other knee. They dominated space expansively. Women condensed. Women crossed their legs by putting one leg over the other and alongside. Women kept their elbows to their sides, taking up as little space as possible. They behaved as if it were their duty not to rub against, not to touch, not to bump a man. If contact occurred, the woman shrank back. If a woman bumped a man, he might choose to interpret it as a come-on. Women sat protectively using elbows not to dominate space, not to mark territory, but to protect..." (p. 438).

This observation of territory and gender is relevant to the idea of a personal bubble, the area of space each individual claims for him or herself, an invisible bubble that surrounds us and expands or contracts depending on personalities, situations, and types of relationships" (Richmond, McCroskey, & Hickson, 2008, p. 127). The notion of territory can be claimed and defended by an individual: primary, secondary, and public. DeVito (2006) defines these three areas as: (1) primary territories, or areas exclusive to the individual and within the individual's complete control; (2) secondary territories which are less exclusive and may not pertain to the individual directly, but maintains a high level of association; and (3) public territories, or areas inclusive of all individuals and very limited in a single individual's control (p. 143). While most forms of territoriality are permanent and fixed, personal space – or the personal bubble – is portable and conforms to the needs of each individual communication context. Richmond, McCroskey, & Hickson (2008) also discuss how "the personal space bubble surrounding women appears to be smaller than the personal space bubble for men... [and] it seems women require less space than men do and do not become upset if less space is awarded to them" (p. 223-4).

One of the most common ways territory is claimed, and therefore the area of personal space expanded, is through the territorial defense method of markers. Richmond, McCroskey, & Hickson define markers as "personal artifacts... [used] to establish boundaries... The more personal the marker, the less likely it is to be moved" (p. 120-21). DeVito (2006) further discusses this defense method by breaking markers down into three types: central markers, boundary markers and earmarkers. Central markers, most common to public settings filled with mostly strangers, "are items you place in a territory

to reserve it" – jackets, purses, bags, etc... (p. 144). Boundary markers, like armrests, extra seats, fences, "set boundaries that divide your territory from 'theirs.'" Finally, earmarkers ("a term taken from the practice of branding animals on their ears") are markers that "indicate your possession of a territory or object." This final type of marker can include monogrammed clothing, nameplates on an office door or trademark logos. Camperio & Malaman (2002) noted the relationship between territoriality and defense, observing that "human territoriality serves to manage privacy and by marking places or objects one reserves a certain space for oneself." Similar observations were also observed in earlier, primary research by Becker (1973) and Altmann (1975). In a study conducted by Camperio (2002) involving seat choice in a waiting room, females "protected oneself by placing personal belongings on the adjacent seat" almost twice as often as men (19.6% of the time for females, versus 10.36% of the time for males). Again, these markers are used to define boundaries and extend the personal zone, which in turn secures personal space.

Social Space

The third proxemic zone defined by Hall is social distance, extending from four feet to twelve feet. This particular zone is especially relevant to interactions between friends and acquaintances in casual, public settings. Marco Costa (2009) conducted a study relevant to a very common social experience, observing the variations in interpersonal distance in group walking within the context of an urban setting. Dyads and groups are inevitable within a public setting context, and there is no doubt proxemics will

play a part in how the group dynamics are formed. Costa observed a total of 2,544 individuals (which composed 1,020 different groups) in a variety of social settings along sidewalks and in areas common to pedestrian traffic. Five specific areas were chosen, varying from a seafront promenade to a main shopping square. The groups were recorded and analyzed for spatial arrangements according to the group size, members' sex, walking speed, and physical similarity between members. The expectations for these spatial arrangements composed Costa's hypothesis for the study. Three separate dyad types were observed among the groups - 14% were mixed (male-female), 49% of the dyads were all female, and 36% were all male. In sixty-seven of the mixed-dyads, males were positioned at the front 74% of the time, perhaps implying a gender-related dominance over females. Even in larger groups (particularly triads and groups with four to five members), males were positioned at the front more often than women. While the mix-gender groups and male-male groups were composed of spatial arrangements with some sort of leader or significant distancing between members, female-female groups were found to have the highest rate of member alignment. In other words, "male groups walked more 'scattered' than female or mixed groups while walking." This specific observation lends support to the previously mentioned notion of a stronger female expectation to be affiliative (Crawford & Unger, 2000), and the increased awareness and avoidance of intimacy with members of the same sex among males (Maccoby, 1990). In a study by Aydin Ozdemir (2008) regarding use of public spaces in shopping malls, interpersonal distance was observed as a cue "people give to others about how they want to interact in whatever environment they are in." The most significant observation made by Ozdemir during the mall study was how "males interacted with other males at the

greatest distances, and males with females interacted at the closest distances." While the setting for this study exists within the public area space, the interactions within the context were of those between groups of acquaintances interacting in a social setting.

Public Space

The fourth and final zone as defined by Hall is public space, extending from twelve feet and beyond. The following study, conducted by Camperio (2002), observed a situation far too familiar to everyone – where to sit in a heavily crowded waiting room. Consider the situation, and imagine the seating options available when the human density is high. The setting fits the definition of a public setting, and the individuals within the area are strangers with little in common. However, the interactions that occur within this public setting relate more closely to the personal space zone earlier discussed. This study has been placed under the public space heading to stress the occurrence of the proxemic behaviors in a setting of unfamiliarity among the individuals. The results to be discussed show an interesting relationship between space violation and females as the choice of stranger to sit next to. Camperio's study observed four separate behaviors that indicated potential proxemic choices: (1) the choice to stay standing for awhile before sitting down, (2) the choice to sit in proximity with someone else, (3) the choice to sit close to someone, when a person sits next to a stranger, and (4) the choice of placing objects on the next seat (use of markers). The first choice, to remain standing for a while, is what Camperio considers an "expansion of distance with strangers," and what others (Altmann, 1975; Sundstrom, 1972) consider a behavior to "possibly reduce interference

with others' activities." The second choice, to sit in close proximity to another, "means placing oneself next to an unknown, and narrowing down one's own personal distance" (Camperio, 2002). This requirement of space violation breaches Hall's public space zone and most of the personal zone, and often enters into the intimate zone (which leads to discomfort). The third choice, to sit next to a stranger, has also been observed by Altmann (1975) and Hayduk (1983) to be a decision affected by the sex and age of the person chosen to sit next to; in other words, a female may appear more desirable as a stranger to sit next to rather than a male. The fourth and final choice, placing markers in the spaces around oneself, is used to maintain distance from others and "protect personal space" (Camperio, 2002).

Before the study began, Camperio (2002) predicted specific behaviors for both men and women in the high-density waiting room. Males were expected to "remain standing for a longer time, and once seated [they] would avoid more frequently proximity places." Females were expected to "most often be chosen as neighbors both by males and females." In regards to standing choice, males (as predicted), chose to stand more often than females, and the frequency of standing choice increased as the density of the waiting room increased (leaving less comfortable seating options available). In regards to "choice of a proximity place," observations were made about an individual's choice to sit next to someone else or not. Again, as expected, women chose proximity more often than men. Furthermore, as the density of the room increased, the frequency of having to sit in close proximity to another also increased. To summarize, this study shows that women, as expected throughout this entire research, are more easily approachable than men, and men prefer more space.

ANALYSIS & RESULTS

Current studies based off Hall's research have continued to make a variety of conclusions about the relationship between gender and proxemics, including some of the following:

(a) female groups tend to interact more closely than male groups, (b) mixed-sex groups have an more increased proxemic tendency than all-male groups, (c) women are easier to approach versus men, (d) women present a more direct body orientation during interactions than men do, (e) all-female groups and mixed-sex groups utilize touch more often than all-male groups, and (f) in mixed-sex group interactions, males initiate touch more often than females (Remland, Jones, & Brinkman, 1995). Richmond, McCroskey, & Hickson (2008), like many researchers and authors, acknowledge gender as a *major* factor observing space (proxemics).

In summary, Richmond, McCroskey, & Hickson point out that "females... tend to interact with others at a closer distance than do males... Females allow others to approach them from the sides more closely than from the front, whereas males allow the opposite... [and] females approach their best friends very closely; males approach people they consider to be just friends" (p. 128). Multiple scholars, including Hall (1966), Sommer (1979), Hayduk (1983), and Ozdemir (2008) found personal space to be "an essential feature of [an] individual's social behaviors in relation to their physical environment and social interactions" (Ozdemir, 2008). Humans, regardless of gender, are organized "according to a *spacing principle* that leaves room between two strangers... [and] number influences the spacing of humans, and people in all contexts keep a larger distance in situations where there is more than one stranger" (Hogh-Olesen, 2008). In Costa's (2009) study of interpersonal distances in group walking, the significance of

gender difference decreased as the size of the group increased, which may suggest "that the greater the group size, the lower the pressure felt by male individuals to keep appropriate distances from other males." Such a suggestion correlates to the idea of gender, and the social expectations that are dictated for both men and women. Others, like Eakins & Eakins (1978) and Henley (1984), also attribute the observed differences of use of space between males and females to the more "affiliative and/or submissive sex roles of women in society relative to men." Furthermore, this attribution lends support to the observation of women tending to "establish closer proximity to others, to use a more direct body orientation, and to be more receptive to the use of touch than men are" (Remland, Jones, & Brinkman, 1995).

In summary, current research based on Hall's proxemic zones continues to observe that females use up less space and feel more comfortable with violating Hall's four proxemic zones. Furthermore, this gender-interaction research continues to conclude that females are allowed to engage in these violations more often than men due to early socialization encouraging females to be more friendly and affiliative. Men, on the other hand, prefer more isolation, and achieve this by taking up more space and expanding into the zones.

CONCLUSIONS

Results collected from the various research and literature were conclusive with the original expectations for this exploratory project. As expected, current studies continue to utilize Hall's foundational research to examine sex differences in proxemic interactions, observing how women use up less space than men, and women are allowed to violate proxemic rules more often than men. Assumptions can also be made that female-female dyads and female-male dyads occur more often than male-male dyads because of the increased liking associated with females over males. If further research were to be conducted beyond the limits of this project, an interesting factor to take into consideration would be the cultural aspect of the proxemic-gender relationship. Different cultures experience space differently, as well as define gender in a variety of different ways, and just as these definitions vary by culture, it can be assumed that the factors affecting the proxemic-gender relationship will also vary. Each subcategory discussed within the literature section (territoriality & personal space, public space, and liking) could also be further researched at a deeper level, expanding each into individual areas of exploration.

The quotation by Hogh-Olesen (2008) at the beginning of this paper referred to interpersonal communication as an instinctual occurrence in nature, something almost animalistic. Hogh-Olesen best summarizes the content of this academic exploration of proxemics by noting that "humans also practice interpersonal spacing in numerous situations when we talk, walk, wait or queue up together, or when we lie on beaches or sit on benches in public places. And we feel intruded on and react when strangers get too close, as if an emotional tinged integrity zone surrounding the body has been invaded."

References

- Altmann I. (1975). The *Environment and Social Behavior*. Monterey, CA: Brooks/Cole. Auden, W. H. (1965). "Prologue: The Birth of Architecture." *About the House*. New York,
 - NY: Random House.
- Baxter J. C. (1970). Interpersonal spacing in natural settings. *Sociometry*, 4, 444-456.
- Becker E D. (1973). Study of spatial markers. *Journal of Personality and Social**Psychology, 26(3), 439-445.
- Brown, N. (2001). "Edward T. Hall: Proxemic theory, 1966." *Center for Spatially Integrated Social Science*. Retrieved from www.csiss.org/classics/content/13.
- Burgoon, J. K., & Le Poire, B. A. (1999). Nonverbal cues and interpersonal judgments: Participant and observer perceptions of intimacy, dominance, composure, and formality. *Communication Monographs*, 66,(2), 105–124.
- Camperio, C. A., & Malaman, M. (2002). Where to sit in a waiting room: Density, age and gender effects on proxemic choices. *Journal of Human Evolution*, 17(3/4), 175-185.
- Costa, M. (2009). Interpersonal distances in group walking. *Journal of Nonverbal Behavior*, 34(1), 15-26.
- Crawford, M., & Unger, R. (2000). *Women and Gender: A Feminist Psychology* (3rd ed.). New York: McGraw-Hill.
- DeVito, J. A. (2006). *Human Communication: The Basic Course* (10th ed.). United States: Pearson.

- Eakins, B. W., & Eakins, R. G. (1978). Sex Differences in Human Communication.

 Boston: Houghton Mifflin.
- Emerson, R. W. (1860). "Behavior." The Conduct of Life.
- Galliano, G. (2003). *Gender: Crossing Boundaries*. United States: Thompson-Wadsworth.
- Hai D. M., KhalruUa Z. Y., & Coulmas N. (1982). Sex and the single armrest: Use of personal space during air travel. *Psychological Reports*, *51*,743-749.
- Hall, E. T. (1966). *The Hidden Dimension*. Garden City, NY: Doubleday & Company, Inc.
- Hall, J. A. (1984). *Nonverbal Sex Differences: Communication Accuracy and Expressive Style*. Baltimore: Johns Hopkins University Press.
- Hayduk, L. A. (1983). Personal space: Where we now stand. *Psychological Bulletin*, 94(2), 293-335.
- Henley, N., & LaFrance, M. (1984). Gender as culture: Difference and dominance in nonverbal behavior. In A. Wolfgang (Ed.), *Nonverbal Behavior: Perspectives, applications, intercultural insights*. Lewiston, NY: C. J. Hogrefe.
- Hogh-Olesen, H. (2008). Human spatial behavior. The spacing of people, objects and animals in six cross-cultural samples. *Journal of Cognition & Culture*, 8(3/4), 245-280.
- Hughes J., & Goldman M. (1978). Eye contact, facial expression, sex, and violation of personal space. *Perceptual and Motor Skill, 46*, 579-584.
- Maccoby, E. E. (1990). Gender and relationships: A developmental account. *American Psychologist*, 45, 513–520.

- Mehrabian A., & Diamond S. G. (1971). Seating arrangement and conversation. Sociometry, 34(2), 281-289.
- Nova Southeastern University. (2009). "Communication: The importance of nonverbal cues." Retrieved from http://www.nova.edu/studentleadership/development/ forms/communication_importance.pdf>
- Ozdemir, A. (2008). Shopping malls: Measuring interpersonal distance under changing conditions and across cultures. *Field Methods*, 20(3), 226-248.
- Pease, A., & Pease, B. (2004). *The Definitive Book of Body Language*. New York: Bantam.
- Piercy, M. (1973). Small Changes. New York: Doubleday.
- Remland, M. S., Jones, T. S., & Brinkman, H. (1995). Interpersonal distance, body orientation, and touch: Effects of culture, gender, and age. *Journal of Social Psychology*, *135*(3), 281-297.
- Richmond, V. P., McCroskey, J. C., & Hickson, M. L. (2008). *Nonverbal Behavior in Interpersonal Relations* (6th ed.). United States: Pearson Education, Inc.
- Sommer, R. (1979). Personal Space. Englewood Cliffs, NJ: Prentice Hall.
- Sundstrom E. (1975). An experimental study of crowding: effects of room size, intrusion, and goal blocking on nonverbal behavior, self-disclosure, and self-reported stress.

 *Journal of Personality and Social Psychology, 32(4), 645-654.
- Sussman N. M. and Rosenfeld M. (1978). Touch, justification, and sex: influences on the aversiveness of spatial violation. *The Journal of Social Psycology*, 106, 215-225.
- Wellens, A. R., & Goldberg, M. L. (1978). The effects of interpersonal distance and

orientation upon the perception of social relationships. *Journal of Psychology*, 99, 39–47.