HOW NATIVE SPANISH AND NATIVE SOMALI SPEAKERS LABEL INANIMATE NOUNS VIS-À-VIS GENDER

by

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CHAPTER ONE: INTRODUCTION

English Language Learners (ELLs) have the arduous task of learning to communicate in another language. With some exceptions, most concepts can be translated between both English and a learner's native language. Proficiency, and the ability to use second language elements fluently, becomes a reasonable objective within the ELL classroom. The discernment and impression speakers from other languages have of mutual words could vary. Therefore, an ELL teacher may not only teach the meaning of English words, but may also be required to explain the perception native English speakers have of words.

Why might non-native speakers of English and native English speakers harbor different impressions toward the same concept? Cultural upbringings and past experiences may affect a person's attitude. However, the grammar system of a language could also greatly influence a speaker's mental representation of common items found in everyday life. More specifically, languages with grammatical gender systems could alter the attributes speakers assign to things (Konishi, 1993; Flaherty, 1999; Boroditsky, Schmidt, and Phillips, 2000). This chapter introduces the elements associated with grammatical gender and perception.

Sex is a classifiable notion used to differentiate biological characteristics of males and females. As considered here, gender is a grammatical concept that distinguishes nouns as masculine or feminine (and as neuter in some languages). In many Indo-European and other languages, gender is employed in a language's grammatical system

(Konishi, 1993). For instance, Spanish classifies all of its nouns and articles into two categories: masculine or feminine. Its morphological suffixes and adjectives must agree with the nouns. Referents with obvious biological sex are classified as either masculine or feminine (i.e. "the boy" would be "el niño," with "el" being a masculine article, and the concept of "boy"/"niño" being perceived as male or masculine) (Nissen, 2002).

Gender is also assigned to words without obvious biological sex, including inanimate objects. For instance, the word for "the table" in Spanish is "la mesa." "La" is the feminine article for the feminine noun "mesa" (Harvey, 2006). Tables do not have biological sex. However, in languages with a grammatical gender system, such nouns are assigned a grammatical gender. The gender of words can vary across languages (Konishi, 1993). In German, "der Tisch" means "the table" and is a masculine noun. "Der" is the masculine definite article that corresponds with the masculine noun "Tisch."

Somali also classifies all of its nouns according to gender. Both the masculine and feminine definite articles must align with masculine and feminine words (as in Spanish). Inanimate referents also indicate a grammatical gender. For instance, "ninki" means "the man," with "nin" meaning "man" and the post-positional suffix of "-ki" being one of the masculine forms of the definite article. The Somali word "dukaanka," which means "the shop," is a masculine word. Velar and glottal consonants, followed by a vowel, indicate a masculine definite article. The post-positional suffix of "-ka" is a masculine definite article. Similarly, "nag" means "woman" and "nagti" means "the woman," with the post-positional suffix of "-ti" being one of the feminine forms of the definite article. Galabta means "the afternoon," and is a feminine word. Dental

consonants, followed by a vowel, usually indicate a feminine definite article that matches with a feminine word. The post-positional suffix of "-ta" is a feminine definite article (Kirk, 1905).

Some researchers suggest that the application of gender tags is a reflection of different languages' focus on different characteristics of an object. For instance, languages that use the feminine gender tag for "the sun" may focus on the warmth that it provides. Languages that have a masculine gender tag may focus on the power of the sun (Konishi, 1993; Boroditsky, Schmidt, and Phillips, 2000). A discrepancy in mental representation of referents between native English speakers and ELLs could be an issue that ELL educators need to address. For younger ELL students, a mismatch of attributes could affect vocabulary building, memorization, and descriptive writing. For older ELL students, a difference in perception of objects could affect analogies and inferencing (Kang and Gillotte, 1993; Narang, Motta, and Bouchard, 1974).

In examining languages with grammatical gender systems, it is interesting to see how a language's assignment of grammatical gender influences a native speaker's perception of referents because it could explain discrepancies in people from different L1s when characterizing various objects. As mentioned, English is a language with a limited grammatical gender system. English assigns masculine, feminine, or neuter genders to its pronouns and possessive pronouns. In most cases, it does not mark its nouns with gender tags. Does the grammatical gender in L1 influence the attributes that an ELL using English assigns to nouns?

Background of the Researcher

I am an elementary ESL teacher in a medium-sized suburban elementary school in the Midwest. In addition to elementary, I have recently taught advanced adult ESL within the same school district. The majority of my elementary students are Spanish speakers. Many of them are bilingual, but have Spanish as their L1. English is usually only used in school. It was a similar scenario with my adult ESL students.

The next largest group of ESL students I work with are Somalis. Most of my Somali students speak English exclusively at school, and speak Somali among family and friends.

I incorporate a lot of vocabulary lessons, descriptive writing and speaking, and higher-level thinking skills into my daily lessons. With elementary and adult ESL students, I have often noticed that my students provide descriptions of things in ways that native English speakers usually would not. For instance, when my elementary students were studying adjectives, I would provide a noun, and the students would give an adjective to pair with the noun. If I gave the noun "tree," one student would give the adjective "tall," but another student would insist that "pretty" was a better fit to describe the noun "tree." These discrepancies among my students (who are mostly native Spanish and Somali speakers) would continue for a range of different words, from a hairbrush, to body parts, to animals. As a native English speaker, I was intrigued by some of the adjective-noun associations. Why did some associations strike me as different? Flaherty (2001) found that gender tags influenced the perception of objects of native Spanish speakers as early as the age of eight years. The students who I teach are all older (with

some being native Spanish speakers and some being native Somali speakers). Perhaps grammatical gender influences native Spanish-speaking elementary students. Could grammatical gender also influence native Somali-speaking students? Similarly, with the adults I teach, the words they included to describe the same objects vary a great deal among the students. In both settings, I found myself agreeing with some interpretations of referents, and being left perplexed over others. These students all have enough English vocabulary to be specific in their word choice. I wanted to know what, if any, linguistic factors influenced the students' perceptions of objects.

The research question for this study is: how do native Spanish and native Somali speakers label inanimate objects in terms of gender? This research will investigate whether a grammatical gender system influences how native Spanish and native Somali speakers assess inanimate nouns vis-à-vis gender (masculine or feminine). Also it will indicate if there is any association between these speakers' gender labels and the grammatical gender in their native language. As an ELL teacher, I will discuss what I can do in my teaching to help my students understand the characterizations that native English speakers give to objects, and move my students toward English proficiency.

This Research and Its Importance to the Field of ELL Education

The aim of this research is not simply to compare the attributes Spanish and Somali speakers assign to objects. Rather, this study investigates perceptual differences between various language speakers, and illuminates the implications this might have for educators working with ELLs.

Students from different first language (L1) backgrounds (i.e. native Spanish or Somali speakers) could have different mental representations of objects. ELLs might have disagreements with English speakers over the characteristics of seemingly neuter referents (Konishi, 1993; Flaherty, 1999). For example, children's literature in English has usually characterized the sun as having stereotypically masculine traits (such as power and courage), and the pronoun *he* is used for the sun's character. Conversely, the moon in children's literature has been characterized with stereotypically feminine traits (such as being passive and weak), and pronominalized with *she*. However, in German, the sun ("die Sonne") has a feminine grammatical gender and is characterized in German children's literature as warm and nurturing. Conversely, the moon ("der Mond") is a masculine word in German and is characterized as strong and courageous (Konishi, 1993). With older students, such perceptual discrepancies could affect higher level thinking skills such as making inferences or analogies (Narang, Motta, and Bouchard, 1974). ELL educators need to be made aware that different attributes could be perceived among English learners based on different language gender systems. Not all native English speakers would characterize the words the same. Of course, the overall context could also influence how the ELLs perceived the words.

Besides translating and thinking in a non-native language, language learners' processing times of texts are also slowed due in part to mismatched referents and corresponding gendered pronouns (Carreiras, Garnham, Oakhill, and Cain, 1996; Irmen, 2007). Grammatical gender in a language may affect which characteristics of a referent a speaker focuses on (Konishi, 1993). Slower comprehension could also be due to the need

to translate meaning and implied characteristics of words. The difference in concepts should be explicitly taught for ELL students who perceive certain objects as having masculine or feminine characteristics. A mismatch of impressions of the same referent often leads to a disruption of communication between an ELL and a native speaker (Scheu and Sanchez, 2002).

Research involving grammatical gender and ELLs is heuristic. It is a start to examine if there is a relation between how an ELL labels the gender of a noun and the speaker's native language. This, in turn, could show trends among ELLs of certain languages and their discernment of objects in English. This research will also help ELL educators be more aware of the possible diverse apprehensions their students have, and develop strategies to help them understand the characteristics that native English speakers focus on in words. It addresses gender bias and stereotypicality present in languages, including English (Konishi, 1994). This study brings an explanation to why some language learners assume certain concepts to be feminine or masculine.

For this study, native Spanish and native Somali speakers' responses to objects when using English will be compared. Spanish and Somali will be compared to each other, and examined discreetly in terms of the grammatical gender of each language's nouns. The responses of the Spanish and Somali speakers will then be compared to the responses of native English speakers. This comparison to English will act as a guide in helping ELL educators teach relevant attributes of objects in English. Spanish is being used because Spanish speakers make up the largest immigrant group to the United States (Nissen, 2002). Somali is being used because it is a less researched language, and there

is a substantial native Somali speaking population present in the United States, and especially the Midwest (Office of Refugee Services of the Minnesota Department of Human Services, 2008). Differences that may arise among Spanish and Somali could be areas that ELL educators can address in their classroom teaching.

New Areas This Research Will Address

This study will explore areas involving labeling and grammatical gender of a language that has not previously been researched. It will also focus on what the data's implications have for ESL teachers.

The Spanish language is used in many research studies, mainly because there is a large population of speakers available. Somali, a less commonly researched language, will be beneficial to study. This study will focus specifically on the Somali immigrants currently living in a specific area in the United States. Somalis are a growing population in various parts of the United States, especially in the Midwest. Estimates put the number of Somali refugees and immigrants living in Minnesota between 15,00 and 20,000 (Office of Refugee Services of the Minnesota Department of Human Services, 2008). Many native Somali speakers are enrolled in ESL classes. A number of the speakers in the study are bilingual in Somali and English. The data in this research provides information to help ESL teachers address the communication needs of their students from languages with grammatical gender systems (such as Spanish and Somali).

The study is a examination between a more widely studied language with grammatical gender (Spanish) and a less studied language with grammatical gender (Somali). Spanish and Somali are well-represented in ESL classrooms in Midwestern

cities at all ages and language proficiency levels. It will be informative to see how these two languages' perspectives of words liken to one another. The Spanish and Somali participants' responses will then be compared to native English speakers' responses. As mentioned earlier, the responses are being compared to English speakers' responses so that ELL educators can have a standard of attributes for certain referents to teach to their students. This comparison will also show any examples of acculturation (or resistance) to the United States culture in certain subgroups of the Spanish- and Somali-speaking participants. The purpose of this study will also give suggestions for how ESL educators can better serve Spanish and Somali speakers and speakers of other languages with grammatical gender systems.

Researcher's Role in This Study

The aim of the research is to investigate whether a grammatical gender system influences native Spanish and native Somali speakers' characterizations of objects in terms of gender. If grammatical gender does play an important part for native speakers in perceiving attributes, is there a relation between their characterization of a referent and the grammatical gender in their native language? My role and aim of this study is to gather enough data from native Spanish and Somali speakers to demonstrate a trend that may be present among their labeling a referent as feminine or masculine, and the grammatical gender of that same referent in their native languages.

I asked twenty-four native Spanish speakers and twenty-three native Somali speakers to indicate which attribute best describes a picture of an inanimate noun. Around twenty of each language group is a good number of participants to see if there are

any emerging trends in the data. The list of adjectives included with each picture corresponds to feminine and masculine traits. I chose objects that have opposite grammatical gender between the two languages. I looked for any trends among the grammatical gender of the object in the speaker's native language, and the assigned gender that the speaker gave. I then compared the native Spanish and Somali speakers' responses to native English speakers' responses and showed any similarities, differences, exceptions, and trends.

The present study should be viewed with some limitations in mind. For one, there are many languages spoken in the world, but this research examines only three languages: Spanish, Somali, and English. This research aims to compare Spanish and Somali with English, present the data, and give suggestions for what the results could indicate for other languages to be studied, and how ELL teachers can better accommodate the needs of many of their students.

This research does intend to show how grammatical gender might affect applying attributes to referents and fluency of English Language Learners. This is a starting point for a discussion on grammatical gender and ELL students' gendered labeling of objects. The discussion is in terms of how it could affect ELL educators and their students. There may be other sociolinguistic indications that result from this research. My role as the researcher is to investigate whether and how a grammatical gender system influences native Spanish and native Somali speakers' labeling of objects when speaking or writing English. Furthermore, I want to discuss what implications this might have for ELL educators working with native Spanish- and native Somali-speaking students.

Summary of the Introduction

This chapter introduced the concepts of biological sex and grammatical gender. These concepts are present in many languages and can influence how speakers characterize objects in terms of having more feminine or masculine characteristics. It demonstrated how these two types of gender systems are represented in some languages. The introduction asked the question: how do native Spanish and native Somali speakers label inanimate nouns in English in terms of gender? The rationale for this study is to investigate how discrepancies in ELLs' (Spanish and Somali speakers') characterizations of words could affect their performance in academic skills, communication, and higher-level thinking skills in English speaking situations. This chapter also mentioned the implications that such perceptual differences could have for teaching Spanish and Somali speakers, as well as all ELLs. The context of the study was given, as was the researcher's role, the researcher's background, and the overall objective of the study.

Chapter Overviews

In Chapter Two, I provide a review of the literature regarding grammatical gender and perception of referents, along with a brief background of Spanish and Somali grammatical gender. Some subtopics I include in this chapter are: the background of grammatical gender; the role of grammatical gender in Spanish and Somali as compared to English; how grammatical gender influences a native speaker's thoughts about an object; the implications of this study for educators who work with Spanish and Somali speakers; finally, the ways in which grammatical gender influences native Spanish and Somali speakers' perceptions of English words. Chapter Three includes a description of

the research design and methodology that guides this study. It provides a rationale for the research paradigm and a description of the participants, location, procedure, analysis, and verification of data. Chapter Four presents the results of this study. In Chapter Five I provide a discussion of the data and what its implications mean for ELL educators. I also discuss the limitations of the study, suggestions for further research, and recommendations for helping ELL students in the classroom.

CHAPTER TWO: LITERATURE REVIEW

This chapter will explain the background of grammatical gender systems. It will also synthesize research on grammatical gender, languages with limited grammatical gender, ELLs and academic tasks, and how speakers' perceptions of objects are influenced by their languages' grammatical gender. Additionally, this literature review will provide relevant background information on Spanish, Somali, and English.

This study's research question is: how do native Spanish and native Somali speakers label inanimate nouns in English in terms of being feminine or masculine? Furthermore, does the grammatical gender in their native language influence how they label the gender associated with words in English? What implications might this research have for language teachers, specifically ELL educators?

Grammatical Gender

Grammatical gender involves the marking of words in order to show agreement and reference to other words (Konishi, 1993). Gender marking often shows relations among words in a sentence. In English, for example, subject nouns and pronouns usually agree in gender (if they are animate nouns) (Vigliocco and Franck, 1999). Some exceptions in English include cars (an inanimate subject noun often referred to with a feminine pronoun, "she"). Ships are another example where the feminine pronoun is often inserted to refer to the subject noun. Romaine (2000) points out that in many of these instances where a feminine pronoun is used to refer to an inanimate object in English, they are objects that have traditionally been owned and used by men.

Although this research is not addressing pronoun usage, it is interesting to note the use of masculine-linked terms and default generic masculine words present in English, a language with limited grammatical gender. English, as well as other languages, has historically used masculine-linked terms and third-person-singular pronouns as default generic words in texts and speech. A review of fourteen studies that investigated people's perceptions overwhelmingly revealed that people reference men when this practice is employed. For example, the participants read a sentence referring to a "chairman" or a "chairperson" and "individual." The participants tended to identify male referents when the masculine term of "chairman" was used, even though it is often supposed to be gender neutral in English. Furthermore, this tendency to perceive men and masculine generics nearly vanishes when "man"-linked words and third-person-singular masculine generics are replaced with alternative gender neutral terms such as "salesperson" instead of "salesman," and "police officer" instead of "policeman." Participants perceived men and women more evenly—not exclusively as men (Todd-Mancillas, 1981).

In language, there are two kinds of gender: grammatical gender and biological gender, commonly referred to as "sex" (Konishi, 1993). Sex in language is based on biological and semantic features (Vigliocco and Franck, 1999). Biological features in English could include any physical or emotional characteristics that are viewed as male or female. Body parts specific to males and females are one example of biological features. Semantic features are the words that indicate if something is male or female, such as pronouns (he or she), or specific names like hen, rooster, bull, mother, or father.

Grammatical gender is the gender label given to nouns, regardless of semantic features and characteristics. Grammatical gender labels are often feminine, masculine, or neuter (Konishi, 1994). For example, in German, "Mädchen" (girl) is neuter, in Swedish, "man" (man) and "kvinna" (woman) have the same grammatical gender. English lacks grammatical gender for most nouns while Spanish and Somali incorporate it. There are a few grammatical morphemes in English that express sex, such as "-ette" ("bachelorette") and "-ess" ("actress") (*Random House Webster's College Dictionary*, 1992). However, these grammatical indicators only denote biological gender and only refer to females due to the biological sex of the referents. There is no need to differentiate the words between genders in order to achieve grammaticality.

In languages with grammatical gender systems, it is necessary to indicate objects as gendered through determiners and nouns (Boroditsky, Schmidt, and Phillips, 2000). For languages with limited gender systems (such as English or Japanese), it is not necessary to assign a gender tag to the referents. Words in languages with limited grammatical gender systems do not need a masculine or feminine gender attached to them.

Grammatical Gender and Perception

The early discussion proposing that our language shapes the way we see the world is attributed to Benjamin Lee Whorf (1956) and his linguistic determinism argument. Whorf proposed that it is language that determines how people view the world. His two often cited examples of this proposal include his work with the Native American Hopi and his work as a chemical engineer. With the Hopi, Whorf notes that they have two

words for the English language's one word for "water"—one word refers to potable water in a container, the other word denotes a body of water. Whorf believes that this is an example of language shaping speakers' perceptions. He believes that because the Hopi have two different words for water, the speakers are determined to view water as these two different concepts. With another example in a chemical factory, Whorf—a former chemical engineer—described how workers would take cigarette breaks in the room with the gas barrels labeled "empty," but would not smoke near the rooms with barrels that were full of gas. In reality, the fumes from the empty barrels were more flammable than the full barrels, but Whorf argued that the English word "empty" caused people to conclude that the barrels are no longer hazardous (Whorf, 1956). Contemporary socio- and psycholinguists point out that Whorf's examples do not demonstrate causality but are instead examples of circular reasoning (Pinker, 2007). Though challenged and scrutinized, Whorf's theories are generally viewed as an impetus in the study of the influence of language on culture and how and why people view their world the way they do. Subsequent research has modified the strict Whorfian principle that thought and action are completely determined by language. Contemporary researchers argue that although language holds a powerful influence on speakers' perceptions, there are other elements to consider in what impacts our thoughts (Pinker, 2007). This present research examines if the grammar of two languages, Spanish and Somali, influences how its speakers label the gender of an object. However, unlike Whorf's argument for linguistic determinism, this study acknowledges that a language's grammar may influence how people view their world, but it does not dictate how a person thinks. Still, Whorf's theory

of linguistic determinism is credited with bringing attention to the many influences that language holds.

If language shapes the way people think, as researchers such as Whorf (1956), Boroditsky, Schmidt, and Phillips (2000), Bassetti (2007), Beyer and Hudson Kam (2008), Flaherty (1999) and (2001) and Konishi (1993) claim, in what ways does language influence a person's gender labeling of an object?

Numerous research articles on grammatical gender and perception have indicated that gender tags influence the characteristics native speakers attribute to various referents (Flaherty, 1999; Flaherty, 2001; Konishi, 1993; Boroditsky, Schmidt, and Phillips, 2000; Zoubir-Shaw, 1996). Speakers' perceptions of characteristics of objects/nouns differ in languages with grammatical gender systems, but contrasting gender tags, for the same objects. For instance, "the bridge" is a masculine word in Spanish ("el puente"), but it is a feminine word in another language, such as German ("die Bruecke") (Boroditsky, Schmidt, and Phillips, 2000; Konishi, 1993). A sizeable number of participants indicated in Boroditsky's study that they viewed "the bridge" with certain connotations. These connotations were either more feminine descriptions or more masculine descriptions. Their labels and gender connotations closely align with the grammatical gender of the word in their L1 (Boroditsky, Schmidt, and Phillips, 2000). Bridges come in different sizes and styles. It is assumed that most people have seen a number of different bridges, whether in real life, photographs, or drawings. What researchers have found, is that despite the variety of bridges, people's personal experiences, and cultural contexts, participants from a particular L1 tended to describe a bridge in a distinct way

than another group of participants with a different L1. Though the German participants might have a variety of cultural backgrounds, educational levels, and experiences, they did share the fact that in their native language, “the bridge” is a grammatically feminine word. The English words they chose to describe “the bridge” tended to be more feminine attributes (see discussion of this topic in Methodology). A similar trend happened with native Spanish speaking participants. In Spanish, “the bridge” is grammatically a masculine word. Native Spanish speakers used English words with more masculine connotations to describe “the bridge” (Boroditsky, Schmidt, and Phillips, 2000).

Languages with limited grammatical gender systems (such as English) do not have gender tags that might influence speakers’ perceptions of objects. However, such speakers might utilize perceived attributes or personify an object in order to categorize an object as feminine or masculine. Native speakers of languages with grammatical gender systems may carry over their L1’s connotations to another language that does not use gender tags (such as English). When asked to describe “a bridge” in English (which is a feminine word in German), native German speakers described a bridge as beautiful, elegant, fragile, peaceful, pretty and slender (stereotypically feminine attributes). In the same task and study, native Spanish speakers described “a bridge” (which is a masculine word in Spanish) as big, dangerous, long, strong, sturdy, and towering (stereotypically masculine attributes) (Boroditsky, Schmidt, and Phillips, 2000). A discrepancy in perception of referents could lead to miscommunication and an inability to properly convey and express information to native speakers of the target language (Kang and Gillotte, 1993).

For most speakers of languages with grammatical gender systems, grammatical gender is a natural, meaningful occurrence in language. Children learning to speak a language with grammatical gender automatically differentiate among objects by assigning them grammatical gender (Boroditsky, Schmidt, and Phillips, 2000).

Grammatical gender systems provide important, though not necessarily conspicuous, meaning to their speakers. Many languages communicate effectively with a limited grammatical gender system (English) or no grammatical gender at all (Finnish) (Flaherty, 1999). Speakers from languages with limited or no grammatical gender might wonder what purpose grammatical gender serves to its native speakers. Though not essential to communicate, there could is an effect of utilizing such a linguistically complex classification system of gendered nouns as in Spanish and Somali compared to English and Finnish (Zubin and Köpcke, 1984). For some speakers, grammatical gender serves a more non-tangible purpose. Categorizing words into gender might give psychological value and meaning and help speakers categorize view their world in a different systematic way than not sorting words by such categories (Zubin and Köpcke, 1984). Sorting words into genders influences speakers to organize their thoughts differently from people whose language does not use grammatical gender.

It should be pointed out that all languages have their idiosyncrasies, and complexities, or as linguist and author John McWhorter writes, their “Dammit!” aspects (2001). There are aspects and features in every language that may seem unnecessary or even confusing to non-native speakers of that language. For speakers whose L1 does not have a grammatical gender system, it can be a challenge to learn the grammatical gender

of a new language. Even when a speaker's L1 has a grammatical gender system, it can be difficult to learn another language's grammatical genders of words. As Romaine (2000) states, "No particular language has a privileged view of the world as it 'really' is (p. 29)." It may not be a necessary or logical feature of a language to non-native speakers of such languages, but grammatical gender serves a purpose for its speakers.

Within a language with a grammatical gender system (i.e. Spanish or Somali), gender tags influence peoples' perceptions of the referents' attributes as more feminine or more masculine (Flaherty, 1999). Even in languages with limited or no grammatical gender (i.e. English, Japanese, Finnish), perceived gender attributes of the objects influence native speakers' gender assignments of the objects (Flaherty, 1999). In Flaherty's study (1999), native English and Japanese speaking participants looked at a drawing of a noun, assigned it a gender (male or female) and then circled an attribute listed that best described the noun. The attributes were previously rated as masculine or feminine. This part of the study indicated that the perceived masculine or feminine attributes usually aligned with the gender that the participants assigned to the noun. For instance, both Japanese and English speakers assigned the feminine gender to a candle, and also circled the feminine attribute that the participants felt best described the noun. There were some instances where Japanese and English speakers differed in their assignment of gender to the objects. For instance, Japanese speakers assigned a feminine gender to a watch, whereas English speakers assigned the watch a masculine gender. This discrepancy could be due to a focus on certain characteristics of the inanimate object, or as Zoubir-Shaw (1996) found, native speakers of a language with a limited

grammatical gender system can randomly assign gender connotations to inanimate objects. Furthermore, in Flaherty's study (1999), Japanese and English speakers also occasionally had a masculine attribute paired with a feminine assigned gender. For example, English speakers viewed a sun as having more feminine attributes, yet these same participants assigned a masculine gender to a sun. Similarly, Japanese speakers indicated that a house has more masculine attributes, yet the Japanese speakers assigned a feminine gender to a house. In most cases in the study, though, both groups' assigned gender matched the gendered attributes (i.e. a teapot is assigned a feminine gender, and its attributes are feminine) (Flaherty, 1999). For Spanish and French speakers (who use grammatical gender in their languages) in this same task, the grammatical gender of the noun seemed to influence the speakers' assigned gender and attributes of the noun. A tree is a masculine noun in both Spanish and French. Both groups of speakers assigned a masculine gender to the noun and circled a masculine attribute to describe a tree.

Konishi (1993) suggests that the variance in languages for different grammatical genders for the same object could be due to an underlying personification. Perhaps different languages and cultures focus on different characteristics of an object. This current study intends to investigate how a grammatical gender system influences its native Spanish and Somali speakers' labeling of objects, and what implications this might have for English language educators.

Language, Cognition, and Culture

A speaker's culture can affect how she or he interacts in the world. Sociolinguists agree that language can influence culture and affect how a person interacts in the world (Romaine, 2000; Pinker, 2007). Whorf's insights into this realm of study have spurred contemporary researchers to delve deeper into the study of cognitive- and sociolinguistics. While language and culture are intertwined, there is no one-to-one relationship that dictates how a speaker of one language would view various aspects of her or his society (Romaine, 2000). There are an infinite number of variables, circumstances, and coincidences that can affect how people perceive the world. That which is important to a culture will be applied to its language's lexicon and grammar (Romaine, 2000; Pinker, 2007). Following up on Whorf, while some researchers argue that language does not necessarily determine thought, they agree that it does affect thought (Pinker, 2007). Rather than specifying that the ubiquitous term "culture" accounts for differences in speakers' conceptions, "linguistic relativity" is a more applicable term when examining how language affects thought (Bassetti, 2007). Linguistic relativity asserts that language affects rather than determines thought. While many domains of thought are common to all people, certain domains are affected by language. Such language-dependent aspects include time, space, number, objects, and even colors (Bassetti, 2007; Pinker, 2007; Boroditsky, Schmidt, and Phillips, 2000). For example, the hunting-and-gathering Pirahã tribe of Brazil has only three number words: "one," "two," and "many." It should be noted that the Pirahã people have no need for exact numbers above two. A modification to the original Whorfian principle would point

out that language might affect thought, but when a society's need for a new concept arises, a word will emerge and fit the need (Pinker, 2007). Likewise, as experiences change, the changes affect language, including perceptions associated with a word.

Studies have shown that linguistic differences among native speakers of different languages affect how these speakers perceive various aspects of society (Bassetti, 2007; Romaine, 2000; Pinker, 2007). In a study investigating grammatical gender and bilingualism, bilingual children who speak Italian and German, living in the same sociolinguistic environment as their monolingual Italian-speaking counterparts, had different perceptions of the same objects. This was most likely due to the bilingual children's exposure to a language that often assigned a different gender tag to its nouns (Bassetti, 2007). Culture plays an important role in our language and interpretation of the world. Language, and linguistic relativity, help explain the possible linguistic effects on perception.

This present study intends to show whether the grammatical gender component of Spanish and Somali can influence the gender labels that native Spanish and native Somali speakers give to images of objects.

ELLs and Language Proficiency

Becoming proficient in a language involves understanding how native speakers perceive and interact with things around them. ELL students may bring with them a different schemata—or background knowledge—than native English speakers hold (Kang and Gillotte, 1993). This background knowledge could include how they perceive objects, which might be affected, in some instances, by grammatical gender in the

speakers' native languages (Bassetti, 2007; Konishi, 1993; Boroditsky, Schmidt, and Phillips, 2000; Flaherty, 1999). A modified Whorfian theory could be applied to help explain some of the discrepancies ELL students encounter when learning English in an English-speaking environment. An ELL's background knowledge and native language might affect how she or he views the world even when using a non-native language.

In the classroom, different conceptions between the language learner and the teacher or text could result in problems in attaining English proficiency (Kang and Gillotte, 1993). Not being fully proficient in a language and only understanding a word's conventional meaning and grammatical structure usually results in explicit, straightforward communication with very little elaboration. Making inferences, comprehending accurately, and applying higher-level thinking are skills difficult to achieve in the L2 (Gabrielatos, 2002; Kang and Gillotte, 1993). ELLs may not realize the discrepancies in their understandings and native English speakers' understandings, ignore them, or alter the information to fit with their initial perceptions and background understandings (Kang and Gillotte, 1993). Academic and communicative problems can surface and complicate achieving English proficiency and affect success at school and elsewhere.

ELLs' schemata and perceptions that are inconsistent with those of the text or speaker could result in incorrect inferences or interpretations. These inconsistencies could stem from a student's L1 and his or her conception of words. Language, along with background knowledge and context, can influence our thoughts and understandings (Pinker, 2007; Whorf, 1956). Grammatical gender in a language affects speakers'

perceptions of objects (Konishi, 1993; Flaherty, 1999). This aspect of many ELLs' native languages could be addressed by the ELL teacher and help lead to English language proficiency. An important first step in addressing miscommunication and also helping teachers to better teach limited English language proficiency may be to highlight a relation between ELL students' gender labeling and the grammatical gender of words in their native language.

There are grammatical gender elements present in both Spanish and Somali. This study will examine how native Spanish and native Somali speakers label inanimate nouns vis-à-vis gender.

Gender in the Spanish Language

Spanish is spoken in Spain, most of Central America, the majority of South America (except Brazil, Suriname, Guyana, and French Guyana), Equitorial Guinea, Western Sahara, the Philippines, Mexico, Puerto Rico, and parts of the United States (Nissen, 2002). There are many bilingual speakers of Spanish, especially in the United States (Romaine, 2000). Spanish is a Romance language, and part of the Indo-European family of languages (Nissen, 2002).

Spanish has two grammatical genders: feminine and masculine (Spaulding, 1967). Inflection is present in Spanish language pronouns, nouns, adjectives, and determiners (Nissen, 2002).

The morphosyntactic functions of Spanish agreement markers for gender are quite consistent (Nissen, 2002). In the Spanish grammatical gender system, 99.89% of nouns with an *–o* ending are masculine. Ninety-six point six percent of nouns ending in *–a* are

feminine. Of the nouns ending in *–e*, 89.35% are masculine (Nissen, 2002). Overall, the markers *–o* and *–a* indicate masculine or feminine referents, respectively (Spaulding, 1967; Nissen, 2002). The following are examples of Spanish nouns, with their grammatical gender indicated:

el niño = the boy (masculine)	la niña = the girl (feminine)
el lago = the lake (masculine)	la montaña = the mountain (feminine)
el vino = the wine (masculine)	la cerveza = the beer (feminine)

Gender in the Somali Language

Somali is part of the Cushitic language family, which is a subgroup of the Afroasiatic family of languages. Somali also has grammatical gender (Awde, 1999; Putnam and Noor, 1993; Kirk, 1905). Somali nouns are highly inflected. Each noun is inflected for number (singular or plural, with eight kinds of plural forms), gender (masculine or feminine) and case (nominative, genitive, absolutive, and vocative) (Putnam and Noor, 1993). There is no rule or indication morphologically of what the gender of a Somali noun is, as there is in Spanish if a word ends with "-o" or "-a." The definite articles are significant parts of the nouns and clearly mark the nouns' gender. The gendered definite articles in Somali are post-positional suffixes (Kirk, 1905; Putnam and Noor, 1993). There can be different vowels, but the gender of the word is still implied (Kirk, 1905). Like Spanish, these definite articles must match the grammatical gender of the nouns they are paired with. Somali does not have indefinite articles like "a/an" in English or "un/una" in Spanish. It is implied when the definite article is not

included in the noun (Kirk, 1905; Awde, 1999). In general, feminine nouns take the dental definite article of either "-ti" or "-di." Masculine nouns in Somali use three guttural post-positional suffixes, the definite articles: "-ki," "-gi," "-hi," and in some words only the vowel "-i." The post-positional suffix has two parts: the linking consonant, followed by the final vowel of the article suffix (Kirk, 1905). The following are examples of nouns, with their grammatical gender indicated, in Somali:

Nin= a man (masculine)	Nag= a woman (feminine)
Ninki= the man (masculine)	Nagti= the woman (feminine)
Albabki= the door (masculine)	Iligti= the tooth (feminine)

(Kirk, 1905)

The gendered articles and classification of nouns as either masculine or feminine make Somali a good language to research in terms of how its native speakers perceive words in English, a language without much evidence of grammatical gender.

What Is Left to Be Addressed

Only a small sample of languages has been researched regarding grammatical gender and perception of an object's attributes. However, many languages integrate grammatical gender. How do speakers of these languages label objects or nouns? Spanish is often researched in studies examining the influence of grammatical gender. In previous research, Spanish has been compared to other languages with grammatical

gender, such as German, French, or Italian (Flaherty, 1999; Konishi, 1993; Boroditsky, Schmidt, and Phillips,2000). With the rise in immigration to the United States from countries spanning the globe, other languages should be examined and compared with each other as well as with English. This research study will look at how native Spanish and native Somali speakers perceive inanimate objects in terms of masculine or feminine grammatical gender. Furthermore, the research might show if there is a relation between the speakers' labeling and the grammatical gender in their native languages. The teaching implications for ELL educators will be addressed in terms of the study's results.

Summary of Chapter Two

Chapter Two described how grammatical gender is used in many languages. Quite a few studies indicate that when a grammatical gender system is present in a language, it influences the characteristics its native speakers attribute to various objects. The chapter also discussed how both language and culture can affect thought. Part of the literature review addressed the academic problems that might arise if ELLs have different impressions and understandings of objects than native English speakers. An overview of grammatical gender in both Spanish and Somali languages was also given. Finally, this literature review described what is left to be addressed with grammatical gender and how native speakers label objects in terms of gender.

In Chapter Three, I will describe the methodology that will be used in this study. The chapter will provide a background and justification for using both quantitative and qualitative research methodology. It will also describe the setting, participants, data

collection techniques, procedure, data analysis and verification, as well as the ethics involved in this study.

CHAPTER THREE: METHODOLOGY

This chapter describes how the research was conducted. It will define and explain the research paradigm of the study, as well as how the data was collected. The chapter will also depict the research's procedure, analysis and verification of the data. There will also be an explanation of the ethics involved in this research.

Research Paradigm

The present study used a qualitative research paradigm supported by a quantitative research paradigm. A qualitative research paradigm is being used because it allows for evaluation of the attributes assigned to each English word. Evaluation can facilitate a deeper discussion of the data. Discussion can take into account the context of the research. Evaluation of the data also provides an opportunity to make connections between the raw data and any patterns and trends that emerge.

The qualitative research component involves observing and trying to understand a specific context (Merriam, 1998). The researcher investigates how the various parts of the data work together (Merriam, 1998). There might be trends in the data that indicate something important about the participants' perceptions and what caused them to view an object in a certain way.

The data was collected by the researcher. The analysis of data led to possible trends and explanations involving speakers' perceptions of words, and the influence of grammatical gender.

Procedure

Participants

The participants in this research study are all adult (eighteen years old and older) native Spanish and Somali speakers. They are all currently living in the United States, but have lived in the United States for varying lengths of time (i.e. some participants may have lived in the United States for many years, while others may have just settled in the country). The selection of participants is contingent upon whom I met and the recommendations the initial participants provided. This is the "snowball" technique (i.e. start with a few respondents and ask them for other possible qualifying participants). The initial participants come from a medium-sized suburb in the Midwest. This setting was chosen because I have easier access to people in this area. This suburb has a growing immigrant population. Though the Spanish and Somali speaking immigrants come from all different socioeconomic levels and living situations in their home countries, in this suburban setting, immigrants have relatively similar living situations. They live and work alongside non-immigrants.

Location

The study was conducted in a suburban area of a large Midwestern metropolitan area. This setting was chosen because it has a diverse population of immigrants and refugees from Somalia and Spanish speaking countries such as Mexico, Colombia, Venezuela, Chile, and Ecuador.

Data Collection Technique 1

Participants were given nine black and white photos and one color photo of inanimate objects (see Appendix A). The objects chosen to be represented in the drawings have opposite grammatical genders in Somali and Spanish. Five objects are masculine in Spanish and feminine in Somali, and five objects are masculine in Somali and feminine in Spanish. The participants all received the same set of photographs. There were no words labeling the picture. The inanimate objects in the study were chosen based on their ability to be recognized by people from diverse backgrounds and based on the objects having opposite grammatical gender tags between Spanish and Somali (Flaherty, 1999).

For the participants to label the photos in terms of gender, the semantic differential scale, developed by social scientists, was used in this study. People constantly use adjectives to make evaluations (Neuman, 2009). The semantic differential scale measures how people subjectively feel about nearly anything: an object, idea, or person (Neuman, 2009). The semantic differential scale uses adjectives with polar opposite meanings (e.g. slow-fast, happy-sad, etc.) and records the connotations that people perceive with a rating (Neuman, 2009). In research using such a scale, participants are asked to rate an object, idea, or person using a scale of polar opposite adjectives.

This research used the semantic differential scale to measure which grammatical gender the participants associate with particular inanimate objects. The semantic differential scale can be used to indicate masculine and feminine traits. Though different

cultural values or perceptions affect people's views, a substantial amount of evidence indicates that people associate certain traits (adjectives) as feminine and certain traits (adjectives) as masculine (Stroupe and White, 1986). Mills (1981) also showed the correlation of pairs of adjectives with polar opposite meanings with feminine-masculine traits. From this, Mills developed a five-point scale, which shows gender connotations using words and traits from a semantic differential scale first developed by Osgood, Suci, and Tannenbaum (1957). Flaherty (1999) simplified Mills' five-point scale to a two-point scale. Both Mills (1981) and Flaherty (1999) used the semantic differential scales to show how people evaluate objects in terms of being masculine or feminine.

For this study, gender is being viewed as a bifurcate concept (feminine and masculine). Flaherty's (1999) modified semantic differential scale was used for this present study. The English adjectives from Flaherty's study that are used in this study are: low-high, hot-cold, small-big, beautiful-ugly, and sad-happy. The first words in each of the five pairs of adjectives are feminine attributes. The second words listed in each pair of adjectives are masculine attributes. For instance, "sad" is a feminine attribute while "happy" is considered a masculine attribute (Flaherty, 1999). The two-point scale pairs more easily with the two grammatical genders in both Spanish and Somali.

Participants were asked to mark one of the words on the two-point semantic differential scale: low-high, hot-cold, small-big, beautiful-ugly, or sad-happy for a total of ten words (five feminine and five masculine). They were informed that they would choose the one word from the ten words of feminine and masculine traits listed that they felt best matched or described the photograph. The photographs will not include any

overt feminine or masculine characteristics that might persuade the participant to label the object as feminine or masculine.

Pilot Study

This study first underwent a pilot study. The pilot study addressed any difficulties in the procedure, which could compromise the data during the actual study. The pilot study tested one Spanish and one Somali speaker. After the pilot study, I asked the participants if the directions were clear or if they felt that there were any issues with the pictures because the different connotations of slightly different words could alter the participants' perceptions. The pilot study also determined if there were any major inconsistencies in translation. There were no inconsistencies. The pilot study participants provided the same words in Spanish and Somali that appear in Appendix B. No further refinements were made.

Materials

A list of the Spanish and Somali words with their grammatical genders and the English translation of the words representing the objects are listed in Appendix B of this research paper. The participants were not given the list of words. A set of the ten photographs was distributed to each participant and is included in Appendix A. On a piece of paper, the respondents indicated to the researcher their native language, approximate age, own rating of English language proficiency, years living in the United States, and sex. This information was used to cross-tabulate with the responses, and to look for emerging trends.

Verification of Data

To ensure that the data of this research was collected without errors, this research underwent a review of the pilot study to make sure that the study was clear and was researching what it intended to research. This study incorporated cross-tabulation of the data to quantify the responses and the background information given by the participants. A university research methodology professor involved with this research study checked the data to verify that it was collected and organized properly. Internal validity was established through peer-examination and review of the data.

Ethics

This study employed the following safeguards to protect the participants' rights:

1. The basic premise of the research was shared with the participants. Participants were informed that the point of the research was to determine how they feel about certain objects in photographs.
2. The participants only willingly and knowingly took part in the study and could refuse to answer any question.
3. The human subjects review was submitted to Hamline University before any data collection began.
4. All participants remained anonymous. They signed a paper that explains their rights during the study and they could decline to take part in any task and at any time during the research. Participants were not referred to by name or identifying characteristics at all in the study.

Summary of the Chapter

In this chapter, the methodology for this study was described. It defined and discussed the qualitative and quantitative research paradigms that were used for this study. It also described the data collection and analysis, procedure, how the data was verified, and the ethical considerations for the research. The next chapter presents the results of this study.

CHAPTER FOUR: RESULTS

In this chapter, the results of the research are discussed and analyzed. The respondents' backgrounds, as well as their survey results are examined. The appearance of trends and cross-tabulation of the data display the results of the research.

Backgrounds of the Respondents

Table 1a shows that there were 72 participants in this study. Twenty-four participants (or 33.3%) were native Spanish speakers, 23 participants (or 31.9%) were native Somali speakers, and 25 participants (34.7%) were native English speakers (see Table 1a). The participants were selected by the researcher and therefore were not part of a random sample. Each participant was eighteen years of age or older and read and signed a consent form before participating in the study.

Table 1a
Number of Spanish, Somali, and English Respondents

	Frequency	Percent
Spanish	24	33.3
Somali	23	31.9
English	25	34.7

The participants filled-out a background information survey. This information was later used to show any trends between the data and an independent variable (such as sex, language, number of years living in the United States, and English language proficiency).

Of the Spanish-, Somali-, and English-speaking participants, 33 were males (or 45.8%) and 39 were females (or 54.2%). This study had more female respondents than male respondents. There were ten native Spanish-speaking males and fourteen native Spanish-speaking females. Of the native Somali-speaking respondents, ten were males and thirteen were females. Finally, there were thirteen native English-speaking male respondents and twelve native English-speaking females (see Table 1b). Thus, for Spanish- and Somali-speaking respondents, there were more females than males, but among English-speaking respondents, there were more males than females. The participants also indicated which age range they are in. There were three categories to choose from: eighteen to thirty years, thirty-one to forty-five years, or forty-six to sixty years. Of the Spanish-, Somali-, and English-speaking respondents, 28 people (or 38.9%) were 18-30 years of age, 27 people (or 37.5%) were 31-45 years of age, and 17 people (or 23.6%) were 46-60 years of age. In the 18-30 years age group, there were nine native Spanish speakers (37.5%), thirteen native Somali speakers (56.5%), and six native English speakers (24.0%). In the 31-45 years age group, there were nine native Spanish speakers (37.5%), eight native Somali speakers (34.8%), and ten native English speakers (40.0%). In the 46-60 years age group, there were six native Spanish speakers (25.0%), two native Somali speakers (8.7%), and nine native English speakers (36.0%) (see Table 1b). The majority of the respondents were 18-30 years of age, with Somali speakers making up the largest part of this subgroup. The next largest age group of respondents was 31-45 years of age, with native English speakers making up the largest part of this

subgroup. Finally, the smallest number of respondents was 46-60 years of age, with English speakers again comprising the largest part of this subgroup.

Table 1b
Percentages of Male and Female and Age Groups by Native Languages

	Male	Female	18-30	31-45	46-60	N
Spanish	41.7	58.3	37.5	37.5	25.0	24
Somali	43.5	56.5	56.5	34.8	8.7	23
English	52.0	48.0	24.0	40.0	36.0	25

Table 1b also displays the number of years that each Spanish- and Somali-speaking participant has been living in the United States ranged from one year to 45 years. Due to this large range of years, the data was combined into three categories: 8 years and less, 9-12 years, and 13 years and more. There were thirteen Spanish- and Somali-speaking respondents (or 27.7%) who have been living in the United States 8 years and less. Twenty-one respondents (or 44.7%) have been living in the United States 9 to 12 years. Finally, there were thirteen respondents (or 27.7%) who have been living in the United States for 13 years and more (see Table 1c). Most of the Spanish- and Somali-speaking respondents have lived in the United States for 9-12 years. Native English-speaking respondents were not included in this table because none of them are immigrants and all of them have lived in the United States their entire lives.

Table 1c
Number of Years Spanish and Somali Respondents Have Been Living in the United States

	8 years and less	9 to 12 years	13 years and more	N
Spanish	25.0%	50.0%	25.0%	24
Somali	30.4%	39.1%	30.4%	23
Total	27.7%	44.7%	27.7%	

Table 1d shows what level of English proficiency the Spanish- and Somali-speaking participants have. The participants individually rated themselves on how well they feel they speak English. This method of using self-reporting is subjective, but it is the most efficient way to gather data and gain a sense of the participants' English proficiency levels. This category does not apply to the native English-speaking participants because they are all native English speakers and thus have high English proficiency. The scale was between one and four, with one being the lowest English proficiency and four being the highest English language proficiency. A total of three (or 6.4%) Spanish- and Somali-speaking respondents indicated a one for English proficiency; eleven (or 23.4%) indicated a two for proficiency; thirteen respondents (or 27.7%) marked a proficiency of three; and twenty respondents (or 42.6%) evaluated themselves as a four in their English proficiency (see Table 1d).

Table 1d
Level of English Proficiency for Spanish and Somali Respondents

	Frequency	Percent
Low Proficiency	14	29.8
High Proficiency	33	70.2

These proficiency levels were later combined into two categories to better display the data and to cross-tabulate the categories with the data. The proficiencies indicated with a one and two were combined into one new category labeled "Low English Proficiency." The proficiencies evaluated as a three and four were combined into another new category labeled "High English Proficiency" (see Table 1d). With these two new categories, fourteen native Spanish and Somali speakers rated themselves as having "Low English Proficiency," and 33 respondents rated themselves as having "High English Proficiency." Most respondents in this study considered themselves to have "High English Proficiency."

Table 1e
Percentages of Number of Years in the United States by English Proficiency Level by Native Language

	8 years and less		9 to 12 years		13 years and more	
	Low	High	Low	High	Low	High
Spanish	83.3	16.7	33.3	66.7	0.0	100
Somali	14.3	85.7	22.2	77.8	28.6	71.4
N	6	7	6	15	2	11

The cross-tabulation of the data among the number of years the respondents have lived in the United States, by how well they speak English, by their native language shows an unanticipated result. Again, the native English-speaking respondents were not included in this cross-tabulation because all of them have high English proficiency and all of them have lived in the United States their entire lives. As shown in Table 1f, the majority of Spanish speakers (83.3%) who have lived in the United States eight years and less, rated themselves as having "Low English Proficiency." One Spanish speaker

(16.7%) rated him- or herself as having "High English Proficiency." However, among Somali speakers, only one respondent (14.3%), who has lived in the United States eight years and less, rated him- or herself as having "Low English Proficiency." The other six respondents (85.7%) rated themselves as having "High English Proficiency." This is surprising to see that the majority of Somali speakers who have lived in the United States for 8 years and less would consider themselves to have "High English Proficiency." Usually people who have lived in a new country (with a different language from their L1) for such a short amount of time would tend to see themselves as having "Low English Proficiency."

There were twenty-one Spanish- and Somali-speaking respondents who have lived in the United States between 9-12 years. Of the Spanish speakers in this category, 33.3% rated themselves with "Low English Proficiency," and 66.7% rated themselves with "High English Proficiency." For Somali speakers in this category, 22.2% rated themselves as having "Low English Proficiency," and 77.8% rated themselves as having "High English Proficiency."

Among Spanish-speaking respondents who have lived in the United States for thirteen years and more, all six respondents (100.0%) rated themselves as having "High English Proficiency." Not every Somali speaker who has lived in the United States thirteen years or more rated himself as having "High English Proficiency." Of the seven Somali respondents in this category, five (71.4%) rated themselves as having "High English Proficiency" and two (28.6%) rated themselves as having "Low English Proficiency."

This is worth noting because one would assume that respondents who have lived in the United States for less time would tend to see themselves as having lower English proficiency (and vice versa for those who have lived in the United States longer). This was not the case for the Somali-speaking respondents in this research. Most of these respondents who have lived here eight years and less believe they have high English language proficiency. Not all Somali respondents who have lived in the United States thirteen years or more felt that they had high English proficiency.

Because the respondents rated their own English proficiency levels, there is no standardized way to view the actual proficiencies of everyone. Other social and academic factors could have influenced how the respondents rated themselves. However, research has shown that when an individual's self-assessment of his or her language proficiency is compared to his or her performance on a standardized language proficiency test, there is a high correlation. The individual's self-assessments are accurate with their language proficiency levels (LeBlanc and Painchard, 1985). This self-rating of the data of the respondents' backgrounds has a minimal effect on the results of the data.

After completing the background information survey, each participant then looked through ten photos of objects and chose one of ten attributes that she or he felt best described each object. The ten attributes remained the same for each object. Based on Flaherty's (1999) semantic differential scale, five adjectives (low, hot, small, beautiful, and sad) correspond with feminine characteristics and the other five adjectives (high, cold, big, ugly, and happy) correspond with masculine characteristics. The participants were not made aware of this correspondence. The following tables display the object and

the frequency with which Spanish and Somali speakers chose a particular adjective that they felt best matched that object. For each image of the objects that the participants labeled, the participants could have been influenced by their cultural backgrounds and experiences. However, the focus of this research is to see if the grammatical gender present in Spanish and Somali influences its native speakers to label inanimate objects as either feminine or masculine. The ten objects were chosen because they have opposite grammatical genders in Spanish and Somali. The way the participants labeled the objects can show an influence from the respondents' L1 if the respondents tended to label the objects in a way that corresponds with the grammatical gender in their L1. The results from the Spanish- and Somali-speaking respondents were then compared with native English-speaking respondents to look for similarities or differences. A complete comparison of each attribute chosen by each language group is in Appendix C.

Respondents' Labeling of Images

Image of building

The word "building" is grammatically masculine in Spanish and grammatically feminine in Somali. For this image, 75% of native Spanish speaking respondents used a masculine characteristic (high, big, ugly, and sad) to label the image of the building, while 25% of native Spanish speakers selected a feminine characteristic (beautiful and sad) to describe the building. Among Somali participants, eleven (or 47.8%) used a feminine attribute (beautiful) to describe the image, while the remaining twelve

respondents (52.2%) chose a masculine characteristic (high, big, ugly, and happy). (See Table 2a.)

Table 2a
Image of Building by Native Language

	Feminine	Masculine
Spanish	25.0%	75.0%
Somali	47.8%	52.2%
N	17	30

A clear majority of both Spanish and Somali speakers labeled the image of a building with a masculine characteristic. Most Spanish speakers chose a masculine attribute for the building while only a slight majority of Somali speakers labeled this image with a masculine attribute instead of a feminine attribute.

Image of clock

The word "clock" is grammatically masculine in Spanish and grammatically feminine in Somali. Twenty-nine point two percent of Spanish speakers labeled the image of the clock with a feminine characteristic (low, hot, small, and beautiful), and 70.8% of Spanish speakers labeled it with a masculine characteristic (high, big, ugly, and happy). A total of 34.8% of native Somali speakers labeled the image with a feminine attribute (low, hot, small, beautiful, and sad). The other 65.2% of Somali respondents selected a masculine characteristic (cold, big, ugly, and happy). (See Table 2b.) The majority of respondents selected a masculine attribute to best describe the image of the clock. Both Spanish- and Somali-speaking respondents showed a clear preference for a

masculine attribute. (See Appendix C for a complete listing of each attribute Spanish-, Somali-, and English-speaking respondents chose.)

Table 2b
Image of Clock by Native Language

	Feminine	Masculine
Spanish	29.2%	70.8%
Somali	34.8%	65.2%
N	15	32

Image of shoe

The word "shoe" is grammatically masculine in Spanish and feminine in Somali. With this image of a shoe, 29.2% of native Spanish speakers selected a feminine characteristic to best describe it (low, small, and beautiful), while 70.8% of this same group of Spanish respondents chose a masculine characteristic to label the image of a shoe (cold, big, and ugly). Among native Somali speakers, 21.7% chose a feminine attribute (low, hot, and beautiful), and 78.3% selected a masculine word to describe the image (high, big, ugly, and happy). (See Table 2c.) Again, both Spanish- and Somali-speaking respondents showed a clear preference for labeling the image with a masculine characteristic. (See Appendix C.)

Table 2c
Image of Shoe by Native Language

	Feminine	Masculine
Spanish	29.2%	70.8%
Somali	21.7%	78.3%
N	12	35

Image of school

The word "school" is grammatically feminine in Spanish and grammatically masculine in Somali. For this image, 33.3% of Spanish speakers selected a feminine characteristic that they felt best described the object (beautiful and sad), while 66.7% labeled it with a masculine adjective (high, cold, and big). Of the Somali speakers, 47.8% described the image with a feminine attribute (small, beautiful, and sad), and 52.2% chose a masculine characteristic (high, cold, big, and ugly). (See Table 2d.) A clear majority of Spanish speakers chose a masculine attribute, while only a slight majority of Somali speakers selected a masculine attribute instead of a feminine attribute for the image of the school. (See Appendix C.)

Table 2d
Image of School by Native Language

	Feminine	Masculine
Spanish	33.3%	66.7%
Somali	47.8%	52.2%
N	19	28

Image of road

The word “road” is grammatically feminine in Spanish and grammatically masculine in Somali. For the image of a road, 41.7% chose a feminine characteristic to describe it (low, hot, small, beautiful, and sad), and 58.3% selected a masculine characteristic (high, cold, big, and happy). Among Somali-speaking respondents, 60.9% chose a feminine characteristic (hot, small, beautiful, and sad), while 39.1% of Somali respondents selected a masculine word to describe the image of a road (cold, big, ugly, and happy). (See Table 2e.) Here a slight majority of the respondents labeled the image as masculine. However, a majority of Spanish speakers labeled the road image as masculine, but a majority of Somali speakers labeled the same image as feminine. (See Appendix C.)

Table 2e
Image of Road by Native Language

	Feminine	Masculine
Spanish	41.7%	58.3%
Somali	60.9%	39.1%
N	24	23

Image of Earth

The word “Earth” is grammatically feminine in Spanish and grammatically masculine in Somali. For the picture of Earth, 45.8% of native Spanish speakers selected a feminine characteristic (beautiful and sad), and 54.2% of native Spanish speakers chose a masculine word (high, cold, big, and happy) to describe the picture. For the Somali

speakers, 30.4% selected a feminine adjective (beautiful), and 69.6% selected a masculine adjective (high, cold, big, and happy) to describe the image of the Earth. (See Table 2f.) A majority of both Spanish and Somali speakers labeled the image of the Earth as masculine. (See Appendix C.)

Table 2f
Image of Earth by Native Language

	Feminine	Masculine
Spanish	45.8%	54.2%
Somali	30.4%	69.6%
N	18	29

Image of cup

The word "cup" is grammatically feminine in Spanish and in Somali it is a grammatically masculine word. Among native Spanish speakers, 95.8% labeled the image with feminine characteristics (low, hot, small, and beautiful), and 4.2% labeled the image of a cup with a masculine characteristic (cold). For native Somali speakers, 91.3% used a feminine adjective to describe the image (hot, small, and beautiful), while 8.7% labeled the image with a masculine characteristic (big and happy). (See Table 2g.) An overwhelming majority of both Spanish and Somali speakers labeled the image of the cup as feminine. (See Appendix C.)

Table 2g
Image of Cup by Native Language

	Feminine	Masculine
Spanish	95.8%	4.2%
Somali	91.3%	8.7%
N	44	3

Image of diaper

The word "diaper" is grammatically masculine in Spanish and grammatically feminine in Somali. A total of 20.8% of native Spanish-speaking respondents selected a feminine word to describe the diaper image (small and sad), and 79.2% used a masculine word to describe the same image (high, ugly, and happy). Among native Somali-speaking respondents, 39.1% selected a feminine characteristic (hot, small, beautiful), while 60.9% chose a masculine characteristic to describe the image of a diaper (big, ugly, and happy). (See Table 2h.) For both Spanish- and Somali-speaking respondents, a clear majority selected a masculine attribute to describe the image of the diaper. (See Appendix C.)

Table 2h
Image of Diaper by Native Language

	Feminine	Masculine
Spanish	20.8%	79.2%
Somali	39.1%	60.9%
N	14	33

Image of door

The word “door” is grammatically feminine in Spanish and grammatically masculine in Somali. With native Spanish speakers, 16.7% used a feminine attribute to describe the image of a door (beautiful and sad), and 83.3% used a masculine attribute (high, cold, big, and ugly). With native Somali speakers, 34.8% selected a feminine word to describe the picture (small, beautiful, and sad), while 65.2% selected a masculine attribute to describe the image (high, big, ugly, and happy). (See Table 2i.) Both Spanish and Somali speakers tended to label the door image with a masculine characteristic. (See Appendix C.)

Table 2i
Image of Door by Native Language

	Feminine	Masculine
Spanish	16.7%	83.3%
Somali	34.8%	65.2%
N	12	35

Image of sun

The word “sun” is grammatically masculine in Spanish and grammatically feminine in Somali. Of the Spanish-speaking respondents, 54.2% chose a feminine characteristic to describe the image (hot and beautiful), and 45.8% of the respondents chose a masculine word (happy). Among Somali-speaking respondents, 82.6% selected a feminine attribute (hot, small, and beautiful), and 17.4% selected a masculine attribute (happy). (See Table 2j.) A majority of both Spanish and Somali speakers labeled the sun image as feminine. A clear majority of Somali-speaking respondents labeled the image

as feminine while just a slight majority of Spanish-speaking respondents labeled it as feminine instead of masculine. (See Appendix C.)

Table 2j
Image of Sun by Native Language

	Feminine	Masculine
Spanish	54.2%	45.8%
Somali	82.6%	17.4%
N	32	15

Table 3a compares how Spanish and Somali speakers labeled objects that are grammatically masculine in Spanish and grammatically feminine in Somali (i.e. a "building" is grammatically masculine in Spanish and grammatically feminine in Somali). The English speakers' responses are not being factored into these percentages because English does not have grammatical gender for these objects. With the exception of the image of the sun, both Spanish and Somali speakers labeled the images of masculine words in Spanish/feminine words in Somali with masculine characteristics.

Table 3a
Percentage of Gender Characteristics for Masculine Words in Spanish/Feminine Words in Somali

	Building		**Clock**		**Shoe**		**Diaper**		**Sun**	
	Sp. (M)	Som. (Fem)	Sp. (M)	Som. (Fem)	Sp. (M)	Som. (Fem)	Sp. (M)	Som. (Fem)	Sp. (M)	Som. (Fem)
% Chose Feminine Characteristic	**25**	**47.8**	**29.2**	**34.8**	**29.2**	**21.7**	**20.8**	**39.1**	**54.2**	**82.6**
% Chose Masculine Characteristic	**75**	**52.2**	**70.8**	**65.2**	**71.8**	**78.3**	**79.2**	**60.9**	**45.8**	**17.4**
N = total number of participants	**24**	**23**	**24**	**23**	**24**	**23**	**24**	**23**	**24**	**23**

Table 3b compares how Spanish and Somali speakers labeled objects that are grammatically feminine in Spanish and grammatically masculine in Somali (i.e. “Earth” is grammatically feminine in Spanish and grammatically masculine in Somali). The English speakers’ responses are not being factored into these percentages because English does not have grammatical gender for these objects. With the exception of the image of the cup for both Spanish and Somali speakers, and the image of the road for Somali speakers, respondents labeled the images of feminine words in Spanish/masculine words in Somali with masculine characteristics.

Table 3b ***Percentage of Gender Characteristics for Feminine Words in Spanish/Masculine Words in Somali***

	Earth		**Cup**		**Door**		**School**		**Road**	
	Sp. (M)	Som. (Fem)	Sp. (M)	Som. (Fem)	Sp. (M)	Som. (Fem)	Sp. (M)	Som. (Fem)	Sp. (M)	Som. (Fem)
% Chose Feminine Characteristic	**45.8**	**30.4**	**95.8**	**91.3**	**16.7**	**34.8**	**33.3**	**47.8**	**41.7**	**60.9**
% Chose Masculine Characteristic	**54.2**	**69.6**	**4.2**	**8.7**	**83.3**	**65.2**	**66.7**	**52.2**	**58.3**	**39.1**
N = total number of participants	**24**	**23**	**24**	**23**	**24**	**23**	**24**	**23**	**24**	**23**

Given this information, there are some patterns that emerged. Within these patterns, a couple of notable exceptions were also apparent. Though the respondents did not necessarily select feminine or masculine characteristics that aligned with the grammatical gender of the words in their native language, a trend did occur.

When a word was masculine in the respondents' native language, the respondents tended to overwhelmingly choose masculine attributes to describe the image of the object. With words that are grammatically feminine in the respondents' native language, fewer respondents chose masculine attributes. Usually a little less than half selected a feminine attribute. For instance, the word "building" is a grammatically masculine word in Spanish. Of the Spanish-speaking respondents, 75% chose a masculine characteristic to best describe the image of a building. However, "building" is grammatically feminine in Somali, and 47.8% of Somali respondents selected a feminine characteristic to describe the image of a building. Though it is a grammatically feminine word in Somali, the majority of Somali respondents (52.2%) still chose a masculine characteristic (see Table 3a). Conversely, the word "Earth" is grammatically masculine in Somali. Of the Somali-speaking respondents, 69.6% chose a masculine attribute to best describe the image of the Earth. In Spanish, Earth is a grammatically feminine word. However, only 45.8% of native Spanish-speaking respondents selected a feminine attribute to describe the image. The other 54.2% chose a masculine adjective to best describe the image of the Earth, despite the Spanish word for Earth being grammatically feminine. In these two

examples, for the words that are grammatically masculine in the respondents' native language, a large percentage of these respondents selected a masculine characteristic to best describe the image (70% or more). For words that are grammatically feminine in the respondents' native language, a smaller percentage of these respondents selected a feminine characteristic to best describe the image (less than 50%). In general then, the initial idea that participants would select a feminine or masculine characteristic that corresponded with the grammatical gender of the word in the participants' native language, is not correct. Participants did not show a clear preference for labeling grammatically feminine words in their L1 with feminine characteristics, and labeling grammatically masculine words in their L1 with masculine characteristics. However, this trend of masculinization (applying more masculine attributes to objects) is worth noting, especially when the native English speakers' responses are discussed. It is also important to point out that grammatically masculine words in a respondent's native language seemed to have a strong impact in the respondents selecting a masculine characteristic instead of a feminine characteristic. Some exceptions did occur.

One exception occurred with the image of a cup. The word "cup" is a grammatically feminine word in Spanish and a grammatically masculine word in Somali. An overwhelming majority of both Spanish and Somali respondents selected feminine characteristics (95.8% and 91.3%, respectively). Apparently, both groups of respondents viewed the image of a cup with mostly feminine characteristics. Native English speakers

also participated in the same survey as the Spanish and Somali respondents. Native English-speaking respondents overwhelmingly chose feminine characteristics to best describe the image of a cup (See Appendix C for a complete listing of each attribute chosen by each language group.) There was no clear example of masculinization of an object in this example.

Cross-tabulation of Data

The image of a building was chosen to discuss in relation to the native Spanish-, Somali-, and English-speaking respondents' background information (native language, sex, age, years living in the United States, and English language proficiency level). Table 4a displays the percentages and numbers of participants who chose a masculine or feminine attribute for the image of the building. The respondents' patterns of labeling the images are generally the same. The image of the building was selected because it was more typical of the pattern found in this study than the image of (for example) cup or sun. (See Table 4a.)

Table 4a

Percentages of Image of Building (masculine in Spanish and feminine in Somali) by Native Language (including English)

	Feminine	Masculine
Spanish	25.0	75.0
Somali	47.8	52.2
English	4.0	96.0
N	18	54

Cross-tabulation of Building by Sex by Native Language

In Table 4b, the Spanish-, Somali-, and English-speaking participants were grouped by language (Spanish, Somali, or English), sex (male or female), and then by selecting a feminine or masculine attribute for the image of a building.

Table 4b
Percentages of Image of Building (masculine in Spanish and feminine in Somali) by Sex by Native Language

	Male		Female	
	Feminine	Masculine	Feminine	Masculine
Spanish	30.0	70.0	21.4	78.6
Somali	60.2	40.0	38.5	61.5
English	0.0	100.0	8.3	91.7
N	9	24	9	30

"Building" is a grammatically masculine word in Spanish and a grammatically feminine word in Somali. Of the male Spanish-speaking respondents, the majority, or 70.0%, selected a masculine attribute to best describe the building image. Thirty percent of the male Spanish-speaking respondents selected a feminine characteristic to label the image of the building. For male Somali-speaking respondents, 60.0% chose a feminine attribute for the building image, whereas 40.0% of this same group selected a masculine

characteristic. Among the female Spanish-speaking respondents, 78.6% (eleven total) chose a masculine attribute to label the image of a building, and 21.4% chose a feminine attribute. Similarly, the majority of female Somali-speaking respondents (61.5%) chose a masculine characteristic to describe the image, and 38.5% chose a feminine characteristic. For the male English-speaking respondents, 100.0% selected a masculine attribute for the building image. Among female English-speaking respondents, 91.7% chose a masculine attribute whole one respondent (8.3%) chose a feminine attribute.

It appears that male Spanish- and Somali-speaking respondents, as well as female Spanish-speaking respondents, tended to choose an attribute to describe a building based on that object's grammatical gender in their native language. Female Somali-speaking respondents did not seem to follow this pattern. Eight out of thirteen respondents (61.5%) in this group selected a masculine adjective to describe the image of the building. There are possible explanations as to why this was the case in this research for these respondents. Twenty-four out of twenty-five male and female native English-speaking respondents selected a masculine characteristic to best describe the image of the building. These respondents were not influenced by their L1's grammatical gender because there is no grammatical gender for a building in English. As discussed earlier, United States culture, as well as other cultures, has a tendency to have the default perception of many objects as masculine. Feminine objects are deemed deviant (Romaine, 2000). Often, the longer a person lives in a particular culture, the more they

tend to adopt the dominant culture. If masculinizing objects is prominent in the culture of the United States (as is the case with this study's native English-speaking respondents), most of these Somali-speaking females have lived in the United States longer than their male counterparts, and the male and female Spanish-speaking respondents. Therefore, perhaps they have adopted the culture of masculinizing objects more than the other respondent groups. A further, more in-depth study is necessary to determine what influences males and females of different language backgrounds with grammatical gender systems in choosing masculine or feminine characteristics for objects.

Cross-tabulation of Building by English Proficiency Level by Native Language

In Table 4c, the Spanish- and Somali-speaking respondents were grouped by native language, English proficiency (low or high), and then grouped by if they chose a feminine or masculine attribute for the image of a building.

Table 4c
Percentages of Image of Building (masculine in Spanish and feminine in Somali) by English Proficiency Level by Native Language

	Low		High	
	Feminine	Masculine	Feminine	Masculine
Spanish	44.4	55.6	13.3	86.7
Somali	40.0	60.0	50.0	50.0
N	6	8	11	22

As mentioned before, “building” is a grammatically masculine word in Spanish and a grammatically feminine word in Somali. Among the Spanish-speaking respondents who have low English proficiency, 44.4% selected a feminine characteristic and 55.6% selected a masculine characteristic to best describe the image of the building. Though the majority of this subgroup chose a masculine attribute, which would match with a grammatically masculine word in Spanish, it is not a clear majority. Among the Spanish speakers with high English proficiency, 86.7% chose a masculine attribute to best describe the building image, and only 13.3% of this same subgroup selected a feminine attribute. I would not necessarily assume, especially because English does not have grammatical gender, that the longer a person has stayed in the United States and has become more proficient in English, this person would less likely be influenced by his or her native language when selecting a characteristic to match an object. Conversely, a person who has had less exposure to English is presumed to rely more heavily on his or her native language. However, this was not the case with the Spanish speakers.

The breakdown between English proficiency and native language was different among Somali speakers. Sixty percent of Somali-speaking respondents with low English proficiency selected a masculine characteristic, and 40.0% selected a feminine characteristic to best describe the image of a building. Of the Somali-speaking

respondents with high English proficiency, 50.0% chose a feminine adjective for the building image. For both the low and high English proficiency Somali speakers, there is no clear preference for labeling the image of a building with either feminine or masculine characteristics. Based on the data in this table, there is no definite way of determining what might have influenced how the Somali speakers chose an attribute to describe the image of a building. It could be argued that the length of stay in an English-speaking society with a masculine preference for viewing objects, reinforced non-native speakers' preference for viewing things as masculine. This contributed to the Spanish speakers' preference for labeling the building image as masculine because the word is masculine in Spanish. It also could have increased the Somali speakers' preference for a masculine label, which was mitigated by the fact that the word building is feminine in Somali. This might also be the case for other images in this study, such as clock or diaper. More research is needed in finding how language proficiency might affect how respondents label the grammatical gender of an object.

Cross-tabulation of Building by Age by Native Language

In Table 4d, the Spanish-, Somali-, and English-speaking respondents were grouped by native language, their age, and then by if they chose a masculine or feminine attribute to best describe the image of a building.

Among the Spanish-speaking respondents who were 18-30 years old, four respondents (44.4%) selected a feminine adjective to match the image of a building, and

five respondents (55.6%) selected a masculine adjective for the same image. For Somali speakers in this same age group, six respondents (46.2%) chose a feminine attribute and seven respondents (53.8%) chose a masculine attribute for the building image. For English-speaking respondents, all six respondents (100.0%) chose a masculine characteristic.

The next age group in this study was 31-45 years old. For Spanish speakers in this age category, only one respondent (11.1%) chose a feminine characteristic, while eight respondents (88.9%) chose a masculine characteristic to describe the building image. Among Somali-speaking respondents in this same age group, three respondents (37.5%) chose a feminine attribute, and five respondents (62.5%) chose a masculine attribute for the building image. For the English speakers, nine respondents (90.0%) selected a masculine characteristic and one respondent (10.0%) selected a feminine characteristic.

Table 4d

Percentages of Image of Building (masculine in Spanish and feminine in Somali) by Age by Native Language

	18-30		31-45		46-60	
	Feminine	Masculine	Feminine	Masculine	Feminine	Masculine
Spanish	44.4%	55.6%	11.1%	88.9%	16.7%	83.3%
Somali	46.2%	53.8%	37.5%	62.5%	100.0%	0.0%
English	0.0%	100.0%	10.0%	90.0%	0.0%	100.0%
N	10	18	5	22	3	14

The final age category was 46-60 years old. One Spanish speaker (16.7%) chose a feminine characteristic, and five Spanish speakers in this same age category (83.3%) chose a masculine characteristic. There were only two Somali-speaking respondents for this age category and both (100.0%) selected a feminine characteristic to best describe the image of a building. For English-speaking respondents in this age category, nine (100.0%) chose a masculine attribute and none chose a feminine attribute.

It appears that among the Spanish- and Somali-speaking respondents in the youngest age category (18-30 years), both of these language groups were split between choosing a feminine or masculine adjective. It is possible that this younger age group came to the United States at an earlier age, attended English-speaking schools, and are

therefore less likely to rely on their native language (and its grammatical gender) in determining what kind of adjective best describes an object.

For the 31-45 years old age group, the Spanish speakers overwhelmingly selected a masculine attribute for the building image (88.9%). With the word "building" being grammatically masculine in Spanish, this age group of Spanish speakers followed the initial idea of this study—respondents will choose a masculine or feminine characteristic for an object based on the grammatical gender of that object in their native language.

Though not a clear majority, more than half (62.5%) of the Somali speakers in the 31-45 years of age category chose a masculine attribute for "building." With "building" being a grammatically feminine word in Somali, this subgroup did not align with the initial idea of this study. It does show that "building" is not as strongly masculine as it is for Spanish speakers in this age group. The dominant culture of the United States might have influenced these respondents to view objects as having more masculine qualities to them (only one English-speaking respondent out of twenty-five chose a feminine attribute) than if they were in an exclusively Somali-speaking culture.

The final age group, 46-60 years old, more closely aligned with the first supposition of this research for both Spanish and Somali speakers in that words that are grammatically masculine in a speakers' L1 will be labeled as masculine by that speaker and vice versa for feminine words. Perhaps these respondents are newer to the United States, or are less proficient in English, and are therefore more likely to rely on their

native language's grammatical gender in matching attributes with objects. Further qualitative research is needed in order to determine the possible causes of why a particular age subgroup selected feminine or masculine characteristics to match an image of an object.

Cross-tabulation of Building by Number of Years in the United States by Native Language

In Table 4e, the Spanish- and Somali-speaking respondents were grouped by native language, the number of years they have lived in the United States, and then by if they chose a masculine or feminine attribute to best describe the image of a building. The native English-speaking respondents were not included in this cross-tabulation because all of these respondents have lived in the United States their entire lives.

The first category is for respondents who have lived in the United States 8 years and less. For the Spanish speakers, three respondents (50.0%) chose a feminine attribute to describe the building image, and three respondents (50.0%) chose a masculine attribute to describe it. Among the Somali-speaking respondents, five (71.4%) selected a feminine characteristic, and two (28.6%) selected a masculine characteristic for the image of a building (see Table 4e).

Table 4e
Percentage s of Image of Building (masculine in Spanish and feminine in Somali) by Number of Years in the United States by Native Language

	8 years and less		9 to 12 years		13 years and more	
	Feminine	Masculine	Feminine	Masculine	Feminine	Masculine
Spanish	50.0%	50.0%	16.7%	83.3%	16.7%	83.3%
Somali	71.4%	28.6%	44.4%	55.6%	28.6%	71.4%
N	8	5	6	15	3	10

The next category is for respondents who have lived in the United States from 9-12 years. For the Spanish speakers in this category, two respondents (16.7%) selected a feminine adjective, and ten respondents (83.3%) selected a masculine adjective to best describe the image of the building. For Somali speakers in this category, four respondents (44.4%) chose a feminine attribute, and five respondents (55.6%) chose a masculine attribute for the building image.

The final category for the number of years a respondent has lived in the United States is 13 years and more. Among Spanish speakers, only one respondent (16.7%) chose a feminine characteristic, while five respondents (83.3%) chose a masculine characteristic for the building image. For this same category of Somali speakers, two respondents (28.6%) selected a feminine characteristic, and five respondents (71.4%) selected a masculine characteristic for the building image.

This cross-tabulation of data shows another trend worth noting. Somali speakers who have lived in the United States the shortest amount of time seemed to rely more on their native language's grammatical gender in order to label the image of a building.

Somali speakers who have lived in the United States a longer amount of time (in the 9-12 years and 13 years and more categories) could be less influenced by their L1s' grammatical gender for building and might be more aligned with the dominant culture's preference for masculinizing objects. Spanish speakers in this same category were equally split in choosing an attribute. In the category for respondents who have lived here nine to twelve years, the Spanish speakers overwhelmingly selected a masculine characteristic to match the building image (with "building" being a grammatically masculine word in Spanish). They could be relying on their native language more to determine a matching characteristic for a building image. For both the Spanish and Somali speakers, who have lived in the United States for 13 years and more, they have a preference to label the image of the building as masculine. With "building" being a masculine word in Spanish, the Spanish speakers living in the United States for a longer time have their labeling of masculine attributes reinforced by the United States cultures' masculine preference. The Somali speakers living in the United States 13 years and more could have adopted the United States' culture of masculinizing objects. Further research needs to be conducted in order to determine what might influence a particular group of Spanish or Somali speakers who have lived in the United States for a certain number of years to choose a masculine or feminine attribute to describe an object.

Mean Scores

Table 5 is important in showing overall how masculine and feminine Spanish- and Somali-speaking respondents rated masculine words in Spanish/feminine words in Somali, and feminine words in Spanish/masculine words in Somali. This table finds a mean (average) score for masculine and feminine words and compares how Spanish and Somali speakers selected attributes. The native English-speaking respondents were not included in the cross-tabulation because English only has a limited grammatical gender system.

Table 5
Mean Scores for Masculine and Feminine Words in Spanish and Somali

Spanish or Somali Respondent		Score Masculine Word in Spanish/Feminine Word in Somali	Score Feminine Word in Spanish/Masculine Word in Somali
Spanish	Mean	8.4167	7.6667
	N	24	24
	Std. Deviation	1.01795	1.00722
Somali	Mean	7.7391	7.3478
	N	23	23
	Std. Deviation	1.09617	1.07063
Total	Mean	8.0851	7.5106
	N	47	47
	Std. Deviation	1.10000	1.03991

Using SPSS software, each feminine attribute was assigned one point, and each masculine attribute was assigned two points. There were five masculine words in Spanish/feminine words in Somali, and five feminine words in Spanish/masculine words in Somali. Therefore, a perfect feminine mean score for a feminine word in the respondents' native language would be five, and a perfect masculine mean score for a masculine word in the respondents' native language would be ten. Average scores closer to ten are objects that respondents viewed as more masculine. Average scores closer to five are objects that respondents viewed as more feminine. The objects are categorized into "Masculine Words in Spanish/Feminine Words in Somali," and "Feminine Words in Spanish/Masculine Words in Somali."

For the first category, "Masculine Words in Spanish/Feminine Words in Somali," Spanish speakers generally viewed these five words as masculine, with a mean score of 8.4. Somali speakers in this same category had a mean score of 7.7. Though the Somali speakers viewed the words in this category as a little less masculine than the Spanish speakers, the score still reflects a more masculine view of the objects. A score closer to six would indicate a more feminine view of the objects.

For the second category, "Feminine Words in Spanish/Masculine Words in Somali," Spanish speakers viewed these objects as a little less masculine than the other category, but still not very feminine. The mean score was 7.7. Somali speakers in this second category scored a mean of 7.3. This implies that they viewed grammatically

masculine words in their native language as a little more feminine than they did for grammatically feminine words.

Table 6a shows a ranking of the percentage of Spanish- and Somali-speaking respondents who selected a feminine attribute for a grammatically feminine word in their native language. The average shows the average percentage of Spanish- or Somali-speaking respondents who selected a feminine characteristic for grammatically feminine words in their native language. With the exception of the sun image for Somali speakers and the cup image for Spanish speakers, not a high percentage of respondents viewed grammatically feminine words in their native language as having feminine characteristics. Only the Spanish and Somali speakers' responses were used in these percentages and averages for Tables 7a and 7b because English does not have grammatical gender for these nouns.

Table 6a
Percentages and Average of Feminine Attributes Selected by Somali Speakers for Grammatically Feminine Words in Somali and Spanish

Grammatically Feminine Words in Somali		Grammatically Masculine Words in Spanish	
Sun	82.6%	Cup	95.8%
Building	47.8%	Earth	45.8%
Diaper	39.1%	Road	41.7%

Clock	34.8%	School	33.3%
Shoe	21.7%	Door	16.7%
Average	45.2%	Average	46.7%

Table 6b shows a ranking of the percentage of Spanish- and Somali-speaking respondents who selected a masculine attribute for a grammatically masculine word in their native language. The average shows the average percentage of Spanish- or Somali-speaking respondents who selected a masculine characteristic for grammatically masculine words in their native language.

Table 6b
Percentages and Average of Masculine Attributes Selected by Somali Speakers for Grammatically Masculine Words in Somali and Spanish

Grammatically Masculine Words in Somali		Grammatically Masculine Words in Spanish	
Earth	69.6%	Diaper	79.2%
Door	65.2%	Building	75.0%
School	52.2%	Shoe	71.8%
Road	39.1%	Clock	70.8%
Cup	8.7%	Sun	45.8%
Average	46.9%	Average	68.5%

Most Spanish- and Somali-speaking respondents labeled grammatically masculine words in their native language as masculine. For Somali speakers, the exception was for the image of a cup. A cup might be viewed as very feminine because it is thought to represent female fertility. In this instance, only 8.7% labeled the image with a masculine characteristic. This considerably lowered the average of the percentage of Somali speakers who labeled grammatically masculine words in Somali as masculine. For Spanish speakers, the exception for most respondents labeling grammatically masculine words in Spanish as masculine was for the image of the sun. Just under half of the Spanish-speaking respondents (45.8%) labeled this image as masculine. For the other four images, around 70% of Spanish-speaking respondents labeled them as masculine. This shows that among native Spanish speakers, there is a strong preference to label grammatically masculine words in Spanish as masculine. Only the Spanish and Somali speakers' responses were used in these percentages and averages for Table 6b because English does not have grammatical gender for these nouns. (See Appendix C for how each language group of respondents labeled each image.)

Major Learnings

This research study examined how a Spanish or Somali speaker's native language might influence how he or she labels images of objects in terms of gender. What the study showed is that in most cases Spanish and Somali speakers tend to label objects that are grammatically masculine in their native language as more masculine than objects that

are grammatically feminine in their native language. However, objects that are grammatically feminine in their native language were not labeled as more feminine. Such objects were not as strongly connotated as being masculine as grammatically masculine objects in their native language, but they were not labeled as more feminine either. Most images of the inanimate objects were viewed as masculine. When the Spanish and Somali speakers' responses were compared to native English speakers' responses, the data showed that native English speakers have more of a preference for masculine attributes when labeling the images in this study than the Spanish- and Somali-speaking respondents. (See Appendix C).

The research also showed that sex, age, number of years living in the United States, and English language proficiency affected how respondents labeled the images of objects vis-à-vis gender.

Spanish-speaking males and females, and Somali-speaking females tended to label an object (in one example of an image of a building) as having more masculine characteristics. Somali-speaking males are more likely to label the same object as feminine. Nearly every male and female native English speaker labeled the image of the building as masculine. In this research among female Spanish and Somali speakers, male Spanish speakers, and male and female English speakers, there is a preference to view objects as more masculine. Male Somali speakers viewed more feminine attributes in the case of the image of a building.

In regards to age, the youngest group of respondents (age 18-30) did not show a clear preference for either masculine or feminine characteristics for both Spanish and Somali speakers. It is possible that this younger group is less likely to be influenced by the grammatical gender in their native language. This finding is similar to Bassetti's (2007) research on bilingual Italian- and German-speaking children. Compared to their monolingual peers, the bilingual children were less influenced by a language's grammatical gender in selecting masculine or feminine attributes. One native English-speaking respondent in the 31-45 age group selected a feminine characteristic. The other twenty-four English-speaking respondents chose a masculine characteristic, showing that across age groups, these native English speakers tend to view an image of a building as masculine. A majority of both Spanish- and Somali-speaking respondents in this same age group also had a clear preference for choosing a masculine characteristic to describe the building image. In the 18-30 years age group, there was just a slight majority for both Spanish and Somali speakers choosing a masculine characteristic. In the 46-60 years age group, most Spanish speakers labeled the image with a masculine attribute, but all of the Somali speakers labeled the image with a feminine attribute. Other factors in their culture and upbringing might have had more of an influence on their decisions (Pinker, 2007). Further research examining age and bilingualism could show if cultural upbringing also affected the labeling of referents in younger Spanish and Somali speakers.

Another variable that had an effect on the results was the number of years that a respondent had been living in the United States. According to the data, the longer a Spanish- or Somali-speaking respondent has lived in the United States (nine years and more), the more likely he or she is to select a masculine adjective to describe an image of an inanimate object. Despite the object's grammatical gender in the respondents' native language, both Spanish and Somali speakers who have lived in the United States for nine years and more tend to view objects as being more masculine. The United States culture appears more likely to masculinize objects. With few exceptions, the native English-speaking respondents in this research showed a preference to label objects as having masculine characteristics. (See Appendix C.) Perhaps the longer a person lives in a culture that views objects as having more masculine characteristics, the more likely that person will similarly adopt the more masculine perception of inanimate objects. More research needs to be done on other factors found in the dominant culture as well as the native culture and the effect it has on non-native speakers' perceptions of objects. The data does show trends, but further research needs to be conducted in order to show causalities among the variables.

Conclusion

Overall, it appears objects that are grammatically masculine in Spanish or Somali will continue to be labeled as having masculine characteristics. Objects that are grammatically feminine in Spanish or Somali will not be as strongly viewed as

masculine, but will still not be strongly feminine. This could be due to a tendency to masculinize objects (Romaine, 2000). This study also indicates that the respondents' age and length of stay strongly influenced how they labeled the images. The English-speaking respondents showed a clear preference for labeling the image of the building, as well as other images in this study (see Appendix C), as masculine. Acculturation possibly influences the immigrant respondents to view objects as having more masculine attributes. More research (involving different objects and different attributes for the semantic differential scale) needs to be done in order to gain better insight into how native Spanish and Somali speakers, as well as speakers of other languages, view objects and also to pinpoint other possible influences.

CHAPTER FIVE: CONCLUSION

This final chapter will reflect on the major learnings from the research and will compare them to previous studies mentioned in the Literature Review. In addition, this chapter will also consider the possible implications that this study might have for educators, as well as discuss the study's limitations. Finally, Chapter Five will recommend future research and present a plan for using the results.

Revisiting the Literature Review

The aim of this research was to investigate in what ways, if any, the grammatical gender of a person's native language (Spanish and Somali) might influence how she or he views inanimate objects. Instead of employing a linguistic determinism viewpoint, which

states that language determines how a person thinks, this research is being analyzed in terms of linguistic relativity. This concept states that language does not determine thought, but it does influence one's thinking (Pinker, 2007).

Unlike previous research such as Konishi (1993), Boroditsky, Schmidt, and Phillips (2001), and Flaherty (2001), which showed a correlation between the grammatical gender of a person's native language and how she or he views objects, this research indicated that regardless of a person's native language (Spanish, Somali, or English), she or he will tend to view objects as masculine. Konishi (1993) suggests that the selection of an object as masculine or feminine might be due to the attributes that a society focuses on. In the current study, the Spanish- and Somali-speaking respondents had been living in the United States for varying lengths of time. Perhaps if the United States culture has a tendency to be more masculine-biased than feminine-biased (as the native English-speaking respondents in this study implied), it might influence its people living there to focus more on any masculine characteristics of an object. (See Appendix C.) Though English has only limited grammatical gender, its speakers still appear to focus on the masculine characteristics in an inanimate object. Where grammatical gender might influence its speakers within the culture it is spoken, culture might influence speakers from languages with limited grammatical gender (Flaherty, 2001). Linguistic relativity is applicable in this area because it shows that language is one of many influences on a person. Cultural background, upbringing, and experiences can also affect

a person's perception. The focus of this study was on the grammatical gender in a person's L1 and its influence (if any) it has on its native speakers. The effect of the respondents' cultural upbringing and experiences were attenuated in this study in two ways: the respondents selected were all currently living in the same area of the United States and were able to readily recognize the images of common objects found in this area of the United States (see Pilot Study); also, the survey the respondents completed was all visual images (except for the background information sheet and the ten attributes listed under each image). Each respondent received the same images and was less likely to be influenced by past experiences had the images not been in front of him or her.

The respondents in previous research were living in their countries of origin and speaking their native languages in those cultures, or they were university students and not permanent residents of the country they were studying in. This could have caused them to rely more on the grammatical gender of their native languages. In this study, the objects that are masculine in the Spanish- and Somali-speaking respondents' native language were viewed as more masculine than objects that are grammatically feminine in these respondents' native language. With few exceptions, most objects that are grammatically feminine in the Spanish- and Somali-speaking respondents' native language were still viewed as more masculine than feminine. As the respondents in the present study have lived more permanently in the United States, their experiences have changed and this could have influenced how they now view objects (Pinker, 2007). The

longer that the Spanish- and Somali-speaking respondents have lived in the United States, the more likely they were to label the image of the building as a native English speaker labeled it (masculine). (See Tables 5a and 5e, and Appendix C.) It would be interesting to compare how respondents (whose native language has a grammatical gender system) living in their country or culture of origin, compare to respondents with the same native language, living in a new country, like the United States.

Implications for the Classroom

This study did not show a direct correlation between the grammatical gender of an inanimate object in Spanish or Somali, and how a Spanish or Somali speaking person labeled an image of the object in terms of being masculine or feminine. However, this present study did imply that Spanish and Somali speakers tend to view most inanimate objects as masculine. The more masculine view of these two language groups is in accordance with the native English speakers' preference for labeling objects as masculine.

Though the original supposition of this research does not match the results, there are important implications for teaching that can be applied by ELL educators. Teachers of English should be aware that along with language, a person's experiences and cultural background can influence how she or he views things (such as inanimate objects). An ELL student might have difficulty with some new language concepts. As a result, an ELL teacher should understand that one's cultural background, as well as L1, could affect

the student's ability to become proficient in a certain aspect of the English language. More specifically, teachers should be aware that in addition to the student's cultural background, the grammatical gender in their native language could also influence the attributes that she or he associates with inanimate objects (Konishi, 1993; Boroditsky, Schmidt, and Phillips, 2001). Based on the findings of this research, ELL teachers should be mindful that in United States culture, native English speakers tend to view referents as masculine.

This awareness of how language and culture can affect English Language Learners should also be kept in mind when using higher level thinking skills, such as inferencing and making analogies. Different schemata, stemming from a student's cultural background and native language, help shape how she or he characterizes things. Students learning in an L2 have to navigate and correctly interpret both the lexical and cultural meaning of words (Scheu and Sanchez, 2002). Inferencing, and making analogies, operate on the assumption that everyone holds the same characterizations and perceptions. Students with different characterizations of objects, due to their L1 and cultural background, often struggle to come up with an appropriate solution or misinterpret the intended meaning (Kang and Gillotte, 1993). Most misinterpretations of meaning, due to culture, can be quickly addressed by the ELL teacher. Therefore it is vital that an ELL teacher is aware of how different perceptions affect students' reasoning (Kang, 1992; Scheu and Sanchez, 2002). ELL teachers should both model what an

appropriate solution could be, as well as encourage students to share the reasoning behind their answers. Students should be given time to share and explain how they came to their answers and allowed the chance to rectify any errors. This could bring insight into how students perceive the world. "Think-Pair-Share" activities are an ideal opportunity to let students share their thinking and learn from each other. A student-centered classroom is at the heart of allowing students of all ages to openly share their thoughts, ask questions, make corrections, and become more proficient in English.

Another important part of this research that ELL educators should be aware of is that there is a tendency among native English speakers in the United States (and possibly elsewhere) to focus on the more masculine characteristics of an object. Teachers should encourage a wide range of characteristics to describe objects, but also indicate the more masculine attributes that native English speakers view in referents. To help build vocabulary, an ELL teacher could encourage ELL students to think of more feminine characteristics that also describe the object. In an ELL classroom, a good metacognitive exercise would be to ask students why they characterized the object the way they did. Sharing different perspectives can help improve vocabulary, fluency, and a broader understanding of the connotations a word might carry in English. Transparency is also a key teaching technique. It is best practice for teachers to explain to students the expectations, objectives, and any common problematic areas the students may encounter.

Teachers should explicitly point out to students that their cultural backgrounds and native language have an influence on how they view objects.

Limitations of the Study

If I were to repeat this study, or if it were to be replicated by another researcher, I would recommend a different set of images of objects. This would be good in testing the validity of the original set of images. The particular images of the objects might have influenced the respondents' choice of attributes. Different images might be perceived differently and thus have other results.

I would also recommend to use three different foreign languages from this study: two with grammatical gender systems and one with no or a limited grammatical gender system. This present study had two languages with grammatical gender systems (Spanish and Somali) and one with a limited grammatical gender system (English). Though the two languages with grammatical gender systems did show a preference for labeling objects as masculine, there was a very strong preference from the language with a limited grammatical gender system to label objects as masculine. A study with similar grammar systems involved may or may not show similar results to this present study.

A small limitation of this study was that the image of the sun had to be in color (yellow) because otherwise it was too indiscernible to the respondents if it was just in black and white. Again, a different set of images might prove to work better in that they are more similar and without prominent features that could influence respondents.

This research was meant to collect data and to see if there were any trends in the results. It did not try to show causalities, but it did intend to discuss the trends and how they might affect ELLs.

Reflection

This was a learning process for me: from the information I found in the literature review, to conducting the research, to displaying and making sense of the results.

I plan to share the information and results from this study with both classroom as well as ELL teachers from all grade levels, including adult education. I could present this information through an informal in-service at the school I work at, and also with other district ELL teachers. The information in this research could also be presented at state and national TESOL conferences. I think it is also important to inform family and acquaintances of the different and often subtle challenges ELLs face.

I feel this research strongly supports the concept of linguistic relativity. Language is just one of many facets that can influence a person's perception of the world. With more research in this area of sociolinguistics, it could lead to a greater understanding and appreciation of the work that is involved in becoming proficient in another language.

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APPENDIX A

Photos of the objects used in the research.

_____	low	_____	high
_____	hot	_____	cold
_____	small	_____	big
_____	beautiful	_____	ugly
_____	sad	_____	happy

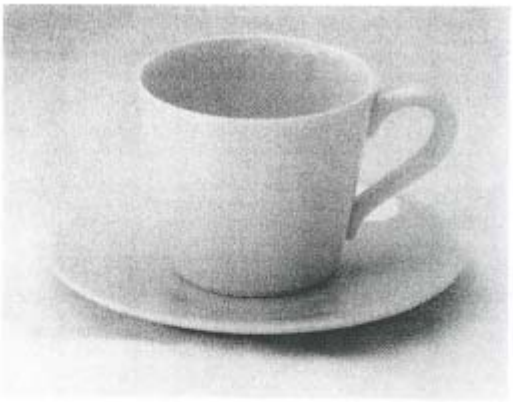
_____	low	_____	high
_____	hot	_____	cold
_____	small	_____	big
_____	beautiful	_____	ugly
_____	sad	_____	happy

_____	low	_____	high
_____	hot	_____	cold
_____	small	_____	big
_____	beautiful	_____	ugly
_____	sad	_____	happy

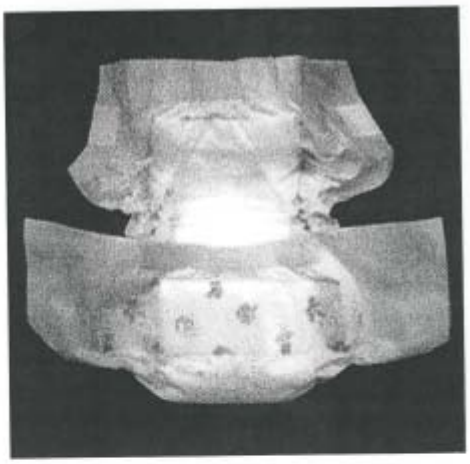
_____	low	_____	high
_____	hot	_____	cold
_____	small	_____	big
_____	beautiful	_____	ugly
_____	sad	_____	happy

_____	low	_____	high
_____	hot	_____	cold
_____	small	_____	big
_____	beautiful	_____	ugly
_____	sad	_____	happy

_____	low	_____	high
_____	hot	_____	cold
_____	small	_____	big
_____	beautiful	_____	ugly
_____	sad	_____	happy



_____	low	_____	high
_____	hot	_____	cold
_____	small	_____	big
_____	beautiful	_____	ugly
_____	sad	_____	happy



_____	low	_____	high
_____	hot	_____	cold
_____	small	_____	big
_____	beautiful	_____	ugly
_____	sad	_____	happy

_____	low	_____	high
_____	hot	_____	cold
_____	small	_____	big
_____	beautiful	_____	ugly
_____	sad	_____	happy

_____	low	_____	high
_____	hot	_____	cold
_____	small	_____	big
_____	beautiful	_____	ugly
_____	sad	_____	happy

APPENDIX B

Objects in Spanish and Somali, with an English translation.

Somali feminine words/Spanish masculine words

1. **building** **(daar; edificio)**
2. **clock** **(sacaad; reloj)**
3. **shoe** **(kab; zapato)**
4. **diaper** **(xafaayad; pañal)**
5. **sun** **(qorrax; sol)**

Somali masculine words/Spanish feminine words

1. **Earth** **(dhul; tierra)**
2. **cup** **(koob; taza)**
3. **door** **(albaab; puerta)**
4. **school** **(iskool; escuela)**
5. **street** **(jid; calle)**

APPENDIX C

The attributes Spanish-, Somali-, and English-speaking respondents gave to each image.

Percentages of Image of Building by Native Language

	Feminine			Masculine				
	Hot	Beautiful	Sad	High	Cold	Big	Ugly	Happy
Spanish	0.0	16.7	8.3	33.3	0.0	29.2	8.3	4.2
Somali	0.0	47.8	0.0	8.7	0.0	39.1	4.3	0.0
English	4.0	0.0	0.0	20.0	20.0	48.0	8.0	0.0

Percentages of Image of Clock by Native Language

	Feminine					Masculine				
	Low	Hot	Small	Beautiful	Sad	High	Cold	Big	Ugly	Happy
Spanish	8.3	0.0	16.7	4.2	0.0	4.2	0.0	20.8	33.3	12.5
Somali	4.3	4.3	8.7	8.7	8.7	0.0	4.3	52.2	4.3	4.3
English	4.0	0.0	12.0	0.0	20.0	8.0	4.0	8.0	12.0	32.0

Percentages of Image of Shoe by Native Language

	Feminine					Masculine				
	Low	Hot	Small	Beautiful		High	Cold	Big	Ugly	Happy
Spanish	12.5	0.0	4.2	12.5		0.0	4.2	33.3	33.3	0.0
Somali	8.7	4.3	0.0	8.7		4.3	0.0	34.8	30.4	8.7
English	36.0	4.0	12.0	0.0		0.0	0.0	20.0	24.0	4.0

Percentages of Image of School by Native Language

	Feminine			Masculine				
	Small	Beautiful	Sad	High	Cold	Big	Ugly	Happy
Spanish	0.0	20.8	12.5	29.2	8.3	29.2	0.0	0.0
Somali	4.3	39.1	4.3	13.0	4.3	21.7	13.0	0.0
English	0.0	4.0	4.0	32.0	8.0	40.0	4.0	8.0

Percentages of Image of Road by Native Language

	Feminine					Masculine				
	Low	Hot	Small	Beautiful	Sad	High	Cold	Big	Ugly	Happy
Spanish	4.2	16.7	4.2	12.5	4.2	4.2	4.2	37.5	0.0	12.5
Somali	0.0	13.0	21.7	21.7	4.3	0.0	8.7	8.7	8.7	13.0
English	4.0	12.0	0.0	48.0	0.0	0.0	0.0	8.0	0.0	28.0

Percentages of Image of Earth by Native Language

	Feminine		Masculine			
	Beautiful	Sad	High	Cold	Big	Happy
Spanish	41.7	4.2	4.2	12.5	33.3	4.2
Somali	30.4	0.0	8.7	17.4	34.8	8.7
English	36.0	0.0	12.0	0.0	52.0	0.0

Percentages of Image of Cup by Native Language

	Feminine				Masculine		
	Low	Hot	Small	Beautiful	Cold	Big	Happy
Spanish	12.5	62.5	16.7	4.2	4.2	0.0	0.0
Somali	0.0	60.9	26.1	4.3	0.0	4.3	4.3
English	0.0	84.0	8.0	0.0	0.0	0.0	8.0

Percentages of Image of Diaper by Native Language

	Feminine				Masculine			
	Hot	Small	Beautiful	Sad	High	Big	Ugly	Happy
Spanish	0.0	16.7	0.0	4.2	4.2	0.0	66.7	8.3
Somali	4.3	26.1	4.3	4.3	0.0	4.3	52.2	4.3
English	0.0	16.0	8.0	8.0	0.0	0.0	60.0	8.0

Percentages of Image of Door by Native Language

	Feminine			Masculine				
	Small	Beautiful	Sad	High	Cold	Big	Ugly	Happy
Spanish	0.0	12.5	4.2	16.7	8.3	37.5	20.8	0.0
Somali	17.4	8.7	8.7	16.7	0.0	21.7	30.4	4.3
English	4.0	24.0	16.0	8.0	12.0	8.0	16.0	12.0

Percentages of Image of Sun by Native Language

	Feminine				Masculine	
	Hot	Small	Beautiful	Sad	Big	Happy
Spanish	45.8	0.0	8.3	0.0	0.0	45.8
Somali	47.8	8.7	21.7	4.3	0.0	17.4
English	60.0	0.0	0.0	4.0	4.0	32.0