Linguistic relativity: Can gendered languages predict sexist attitudes?

Amanda J. Thompson

Advisor: Dr. Susana Sotillo
Readers: Dr. Longxing Wei & Dr. David Townsend

Spring 2014
Linguistics Department
Montclair State University
Linguistic relativity: Can gendered languages predict sexist attitudes?

Amanda J. Thompson

Abstract
The purpose of this study is to find a link between sexism and languages with grammatical gender. Two groups of 14 participants each whose native languages have grammatical gender - Spanish and Russian - and a control group of 14 native English speakers were given an object classification task in which the participants had to choose whether an object would be masculine or feminine. They were also given a Likert-type Social Attitudes Scale to measure their sexist attitudes. The gendered-language native speakers exhibited a tendency to classify objects according to the grammatical gender of that object in their respective languages while the gender assignments for the English speakers was more random. Furthermore, the English speakers expressed less sexist attitudes than did the Spanish and Russian speakers, providing evidence to support the theory of Linguistic Relativity which suggests that language influences thought.

Introduction
The strong version of the Sapir-Whorf hypothesis states that the influence of language on thought is obligatory or at least habitual: thought is always, or under most circumstances, guided by language (Malt et al. 2003). That is to say, the categories and distinctions of different languages yield varying ways of perceiving, analyzing, and acting in the world (Whorf 1956; cited in Boroditsky 2001). There is plenty of evidence to support the weaker version of this hypothesis: that language influences thought under specific and limited circumstances. Therefore, that thought is for the most part guided by language has been long abandoned in the field of linguistics (Boroditsky 2001). However, even definitively answering the less deterministic version has proven challenging to investigate. A possible
reason for this is that thought is highly affected by real world experience, which may interfere with
linguistic effects in tasks which test the influence of language. In the linguistic relativity research, areas
commonly investigated have to do with color perception (Heider 1972, cited in Boroditsky 2003),
number memory (Ellis 1992), and perception of time (Boroditsky 2001). These areas are usually highly
affected by non-linguistic factors such as culture and therefore the role of language on thought may not
be easily ascertained while testing this phenomenon.

On the other hand, research on grammatical gender and thought seems to be much less affected
by real world experience than on the aforementioned aspects. Previously supposed to be arbitrary, -
without any semantic basis - recent studies on the effects of grammatical gender assignment on thought
have suggested otherwise. As stated in Boroditsky et al. (2003), information about the gender of
objects, for example, is only found in language. Likewise, according to Bassetti (2007), “the effects of
grammatical gender are purely linguistic” because there is no alternative, in an experimental setting, for
why a chair could be perceived as feminine but not a bed. For this reason, the present investigation will
focus on the effects of grammatical gender on thought - the consequences of these effects ranging from
the way speakers of different languages categorize and describe objects to how they perceive roles of
men and women in society.

Grammatical gender is a system of noun classification found in many of the world’s languages. In
some cases, the grammatical gender of a noun correlates with its semantic characteristics, such as
biological sex of the referent. For example, “il ragazzo” is an Italian masculine noun meaning “boy”.
However, there are also instances where the grammatical gender of a noun seems to contrast with the
gender of its referent; for example, “la fraternidad” is a feminine Spanish noun, but refers to a fraternity
or brotherhood. A common distinction in gendered languages is that of masculine and feminine, found in
languages such as Spanish, French, Italian, and Portuguese. Another distinction includes both masculine and feminine as well as a neuter gender, as exhibited in German. Some languages have neither a grammatical nor natural gender. These are referred to as genderless languages. In Finnish, for instance, the word “hän” refers to both “he” and “she” (Prewitt-Freilino et al. 2012). Additionally, there are many languages, including English, which do not have a grammatical gender noun system. However, it is relevant to note that even if a language is not gendered in this way, there still may exist certain distinctions that reflect natural gender of referents. This point and its subsequent implications will be addressed later in this discussion.

Theoretical Framework

How early is grammatical gender acquired? In Belacchi and Cubelli (2012), implicit knowledge of grammatical gender was found in children as young as three years old. The participants in this experiment - all native speakers of Italian, a language with masculine and feminine grammatical gender - classified animals according to the corresponding grammatical gender of the referent in Italian. This effect was not found with the control group of speakers of English, a language which does not have grammatical gender (Bellachi & Cubelli 2012). In a similar study, Saalbach et al. (2012) observed that German-speaking children relied on grammatical gender when making inferences about sex-specific biological properties of animals. These results were - at least in part - attributed to the nature of the task. Tasks that require such inferences about sex-specific properties may be more likely to trigger a connection between grammatical gender and biological sex than tasks that do so by asking about entities without a biological sex (Saalbach et al. 2012). In other words, if the participants are required to make inferences about inanimate objects as opposed to animals, they will be less inclined to rely on
grammatical gender as a cue. This contrasts with the findings of other experiments done in the field of grammatical gender and thought (Basetti 2007; Kurinski & Sera 2011) which did indicate the reliance on grammatical gender when classifying inanimate objects. Ramos & Roberson (2011) discussed the nature of different classification tasks and found that effects of grammatical gender arise as a function of linguistic processing and demands of the task - for example, if the task included an overt reference to grammatical gender and involved words instead of pictorial stimuli - rather than having a direct influence on semantic representations. Portuguese speakers only exhibited effects of gender when gender was task relevant - during a similar object classification task being used in the present investigation - or when the stimuli were words rather than pictures.

Whereas the aforementioned research observed how speakers of languages with contradicting grammatical gender assignments for certain entities, Boroditsky, Schmidt & Phillips (2002; cited in Boroditsky et al. 2003) elicited descriptions - from speakers of Spanish and speakers of German - of objects which had opposite grammatical genders between the two languages. Adjectives were rated beforehand by a group of English speakers as either masculine or feminine. The Spanish and German groups then had to assign these adjectives to objects. As predicted, masculine adjectives were used to describe grammatically masculine objects and traditionally feminine adjectives for objects which are grammatically feminine. For example, the word “key” is masculine in German, so common adjectives generated by the participants were “hard”, “heavy”, and “useful”. In Spanish, “key” was described as “lovely”, “shiny”, and “little” (Boroditsky et al. 2002; cited in Boroditsky et al. 2003).

While the previous findings demonstrate the effects of grammatical gender on monolingual children, Bassetti (2007) investigated how children who are exposed to two gendered languages which assign opposite genders to various entities would classify such entities. The participants were children
under the age of eight, who all came from the same sociocultural environment and spoke both Italian and German. It was found that grammatical gender did not have an effect on these bilingual children in classification tasks in which some objects were feminine in German but masculine in Spanish and vice versa. This is in strong contrast to the control group of Italian monolinguals, who appeared to perceive objects as having masculine or feminine characteristics (Bassetti 2007).

Although many studies have focused on the effects of language for early learners, Kurinski and Sera (2011) examined the impact of learning a foreign language with grammatical gender - in this case Spanish - as an adult. The participants consisted of beginning Spanish learners, advanced Spanish learners, and native Spanish speakers. The former two groups were all native speakers of English. In an object categorization task, the native Spanish speakers were more consistent with Spanish grammatical gender than were the learner groups. These findings indicate that learning a second language as an adult can affect categorization, yet these effects differ from those found in native speakers. Because adults’ cognitive concepts have already been formulated, the effects of grammatical gender may be limited when these adults learn a foreign language with such an attribute (Kurinski & Sera 2011).

As these studies illustrate, language can have an effect on thought when it comes to certain tasks such as object categorization, but what about other domains? Prewitt-Freilino et al. (2012) posited that if conventions of grammatical gender can affect a person’s perceptions of gender even in non-human objects - as found in the above studies - could it also affect the real world social relations of men and women? This investigation explored the relationship between countries’ gender language systems - grammatical gender, natural gender, or genderless - and indications of gender equality. To ensure that only the impact of grammatical gender remained, other potential influences on gender equality were accounted for, such as: geographic location, religious tradition, system of government, and relative
human development. As predicted, countries with a grammatical gender language scored lower on a Global Gender Gap scale than countries with a natural gender or a genderless language, suggesting a relationship between the gendering of language at a macro level and society-wide indicators of gender equality (Prewitt-Freilino et al. 2012).

Wasserman and Weseley (2009) explored to which extent the influence of language can impact a person’s perceptions. In this case, it was the extent to which languages with grammatical gender would promote sexist attitudes in those who read and speak such languages. Participants consisting of English, French, and Spanish speakers read a passage from a novel in their respective languages and then completed a Social Attitudes Scale to determine whether or not they expressed sexist attitudes. It was found that participants in the Spanish and French conditions expressed more sexist attitudes than those in the English condition. It must be noted that the majority of participants in the Spanish and French conditions were native speakers of English in the process of learning those languages. Because of this, a second test on Spanish-English fluent bilinguals was performed. It was found that these participants expressed slightly more sexist attitudes when reading a passage in Spanish than when reading in English (Wasserman & Weseley 2009). This coincides with the findings of Prewitt-Freilino et al. and the notion that if language plays a role in how people form their attitudes about gender, differences in the gendered language systems across the world might play a significant role in attitudes about the roles of men and women in society (2012).

The discussed literature has demonstrated to a significant extent that languages with grammatical gender do have effects on the speakers of those languages, such as thinking of an inanimate object as

---

1 Much of the present study is modeled after Wasserman & Weseley (2009), while addressing some limitations: choosing native speakers over second language learners, and using a passage that includes dialogue between male and female characters instead of only male characters.
feminine or masculine according to its gender. This is illustrated by performance on categorization tasks of such objects and tasks that elicit descriptions of the objects using masculine and feminine adjectives according to the referents’ grammatical gender. Furthermore, these studies have shown that speakers of the languages in question can be influenced by this aspect of their language so much so that their attitudes towards men and women are affected. What are possible reasons for this? The existence of a distinction between masculine and feminine grammatical gender systems themselves correlates with effects on classification and sexist attitudes, as previously discussed. However, the unequal division of their use is relevant to note. For example, in languages such as Spanish, the masculine plural is used to refer to any group with a male element, even if it is comprised of only one male and several females: a group of female students would be “las estudiantes” but if they were joined by even a single male, they would have to be referred to as “los estudiantes”. Similarly, in many languages, the masculine pronoun is typically used as a generic pronoun. A generic pronoun is a gendered pronoun used to refer to both genders (Wasserman & Weseley 2009). This occurs even in English: “he” or “him” is often used generically, though its use is now gradually being replaced by generic “them” to avoid sexist language. Likewise, the feminine gender in many languages is marked whereas the masculine is the unmarked form. For example, in Italian the word for a male professor is “professore” while a female professor is “professoressa”. As stated by Prewitt-Freilino et al., “female counterparts for male words are often derived from the masculine term, and are more complex, demonstrating that the masculine is the generic form” (2012). This type of distinction is also found in English when referring to an occupation which is traditionally associated with a specific gender: a male-nurse or female-surgeon, for example. These professions are marked to show an exception to the rule. Whether a language has grammatical gender or not, the marking of such exceptions affects perceptions of social gender and the reliance on
stereotypes when using generic pronouns for specific occupations. That language seems to reflect the stereotypes of traditional gender roles, the gendering of language - whether grammatical or natural - may influence a person’s desire to seek certain employment opportunities (Prewitt-Freilino et al. 2012).

Although much evidence has been shown to support the linguistic relativity hypothesis, this notion has proven difficult to fully confirm. As exhibited by the careful consideration of researchers to control for cultural variables during investigations on the effects of certain linguistic features - in this case grammatical gender - it seems to be assumed that culture would have an influence on language. Therefore, language would not be entirely determined by thought but merely influenced in combination with other factors such as culture. Additionally, if language were entirely determined by thought, it would be likely that each speaker of a grammatically gendered language would be sexist, and there would be no sexist speakers of languages without grammatical gender. The reality is that there are undoubtedly sexist attitudes expressed by both groups. However, as the studies discussed have illustrated, that is not to say there is no influence of these languages and that this influence does not have important consequences. One of these consequences is the possibility of languages with grammatical gender affecting social attitudes toward gender roles and equality. As stated in Wasserman and Weseley, the role of language could be underestimated in the continual existence of sexist attitudes (2009).

**Hypothesis**

Following the findings of previous research in the field of linguistic relativity, the subsequent research questions are addressed: 1. To what extent do gendered languages influence object classification among participants representing three different languages, and 2. To what extent will participants in the Russian and Spanish conditions classify inanimate objects according to their
grammatical gender when compared with participants in the English condition? It is predicted that gendered languages will markedly influence object classification and find expression in sexist attitudes. Participants in the Russian and Spanish conditions will tend to classify inanimate objects according to their grammatical gender to a greater extent than participants in the English language condition, and express a higher proportion of sexist attitudes.

**Methodology**

a. **Participants**

The participants for this project are groups of 14 native Spanish and Russian speakers. Speakers of these languages have been chosen because they are from different language families. Additionally, there is a control group of 14 native English speakers. All of these groups consist of half males and half females, with ages ranging from 18 to 29. They were recruited through undergraduate linguistics courses at Montclair State University and also language-specific forums on Reddit, an online community in which members contribute content such as pictures, opinions, and factual information on specific forums geared toward various interests. Links to the materials were posted to such forums dedicated to Russian, Spanish, and an academic research forum called “Sample Size”. Because many of the participants were recruited via the internet, the groups and their members are not all from the same country or region. How this may affect the results of this investigation will be discussed later. To reduce the amount of bias in participant responses, the they were told that this was a bilingualism study. The reason for this is that if the participants were told this was a study on sexism, they might not honestly answer the questions on the Social Attitudes Scale.

b. **Materials**
This experiment consists of three tasks: reading a passage from popular literature in the participants’ native language, a classification task of inanimate objects, and a Social Attitudes Scale on gender equality. Before performing any of these tasks, the participants filled out a demographic questionnaire in English. All of these components of this experiment were created on a survey app called Google Forms. The surveys were all titled “Bilingualism Study” followed by the name of the language in which the survey was being taken (for example, “Bilingualism Study - Spanish”). Since participating in the experiment required enough knowledge of English to at least read and understand the first set of instructions and the consent forms, this was a suitable alternative title.

The passage that the participants read - from Harry Potter and the Prisoner of Azkaban (Rowling 1999) contains ~100 words depending on the language. The purpose of this task was to get the participants to think in the language in which they were going to complete the subsequent tasks. Harry Potter and the Prisoner of Azkaban was chosen in particular because it is widely translated and more importantly, contains several exchanges between strong male and female main characters:

“If anyone’s looking out of the window – “ Hermione squeaked, looking up at the castle behind them.

“We’ll run for it,” Harry said determinedly. “Straight into the forest, all right? We’ll have to hide behind a tree or something and keep a lookout –”

“Okay, but we’ll go around by the greenhouses!” said Hermione breathlessly. “We need to keep out of sight of Hagrid’s front door, or we’ll see us! We must be nearly at Hagrid’s by now!”

Still working out what she meant, Harry set off at a sprint, Hermione behind him. They tore across the vegetable gardens to the greenhouses, paused for a moment behind them, then set off again, fast as they could, skirting around the Whomping Willow, tearing toward the shelter of the forest. . . . (Rowling 1999).

The second part of this experiment consists of a gender categorization task. Simple, black and
white illustrations of ten inanimate objects were given to the participants, who were asked to decide whether the objects should be male or female in a hypothetical fictional story. To avoid the possibility of deducing that participants’ categorization is due to the physical characteristics of objects, the objects chosen for this task have contrasting gender in Spanish and Russian. The grammatically masculine objects in Russian - table, house, bicycle, key, and backpack - are feminine in Spanish while the masculine Spanish objects - fork, book, bone, plate, and boat - are feminine in Russian. Although Russian nouns can also have a neuter gender, objects in this category were left out because Spanish only has a binary distinction. After choosing a gender for each object, the participants were then asked to explain why they made such a selection.

Finally, the participants completed a Likert-type scale in which they rate a series of statements having to do with gender equality according to whether they agree or disagree. The English version of this scale was taken from Wasserman & Weseley (2009) and translated into Russian by a native speaker. The Spanish translation was modified from the original Wasserman & Weseley version by the primary investigator with the assistance of a native Spanish speaker.

Results

The participants in the Russian group exhibited a very strong tendency to classify all of the objects according to their grammatical gender. For the purposes of this study, a “strong tendency” will be defined as more than 75% of the participants responding according to the assigned grammatical gender of their language. In fact, none of the responses fell under 85% for any Russian object, with 4 out of 10 of the objects (‘plate’, ‘boat’, ‘bicycle’, ‘fork’) unanimously classified according to their

2 See Appendix B
3 See Appendix C
grammatical gender. The tendency for those in the Spanish condition to classify objects based on their grammatical gender was less than that of the Russian group. Only one word was unanimous (‘bone’), with half of the classified objects demonstrating more than a 75% tendency toward their grammatical gender. However, possible reasons for this disparity are discussed below.

**Figure 1**: Russian participants’ categorization of objects; (m) denotes the object is grammatically masculine, (f) grammatically feminine.
Spanish Classification Task

<table>
<thead>
<tr>
<th>Object</th>
<th>Masculine</th>
<th>Feminine</th>
</tr>
</thead>
<tbody>
<tr>
<td>table (f)</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>plate (m)</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>boat (m)</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>key (f)</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>bicycle (f)</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>book (m)</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>fork (m)</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>house (f)</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>bone (m)</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>backpack (f)</td>
<td>4</td>
<td>8</td>
</tr>
</tbody>
</table>

Figure 2: Spanish participants’ categorization of objects; (m) denotes the object is grammatically masculine, (f) grammatically feminine.

English Classification Task

<table>
<thead>
<tr>
<th>Object</th>
</tr>
</thead>
<tbody>
<tr>
<td>table</td>
</tr>
<tr>
<td>plate</td>
</tr>
<tr>
<td>boat</td>
</tr>
<tr>
<td>key</td>
</tr>
<tr>
<td>bike</td>
</tr>
<tr>
<td>book</td>
</tr>
<tr>
<td>fork</td>
</tr>
<tr>
<td>house</td>
</tr>
<tr>
<td>bone</td>
</tr>
<tr>
<td>backpack</td>
</tr>
</tbody>
</table>

Figure 3: English participants’ categorization of objects.
The English control group classified objects more randomly than the other groups, but this classification was not completely random. Eleven out of fourteen participants classified ‘table’, ‘key’, and ‘fork’ as masculine, with ‘bone’ unanimously categorized as masculine. ‘Plate’ and ‘house’ were deemed feminine objects by 11 and 13 participants, respectively. The remaining four objects (‘boat’, ‘bike’, ‘book’, and ‘backpack’) were more evenly split between masculine and feminine.

<table>
<thead>
<tr>
<th>Group</th>
<th>English mean</th>
<th>SD</th>
<th>Spanish mean</th>
<th>SD</th>
<th>Russian mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>males</td>
<td>40.57</td>
<td>6.97</td>
<td>37.43</td>
<td>8.40</td>
<td>32.14</td>
<td>9.53</td>
</tr>
<tr>
<td>females</td>
<td>43.57</td>
<td>2.76</td>
<td>36.57</td>
<td>9.24</td>
<td>37</td>
<td>6.63</td>
</tr>
<tr>
<td>total</td>
<td>42.07</td>
<td>5.33</td>
<td>37</td>
<td>6.63</td>
<td>34.57</td>
<td>8.28</td>
</tr>
</tbody>
</table>

Figure 4: mean scores and their standard deviations on the SAS; total possible score: 50

The results for the Social Attitudes Scale (SAS) test are as shown in Figure 4. The score is inversely proportional to the degree of sexism: a higher score indicates less sexist attitudes. A 3 (Language: English, Spanish, Russian) x 2 (Gender: Male, Female) Analysis of Variance shows a significant effect of language (p < .04).

Discussion

The group which expressed the most sexist attitudes overall - the native Russian speakers - was also the group that had the strongest tendency to categorize objects according to their grammatical gender. In the explanations for choosing a particular gender over another, the most common had to do with the grammatical gender of the objects. Thus, this appears to figure prominently in the gendered classification of inanimate objects by Russian speakers.

As aforementioned, not all of the objects were classified as strongly masculine or feminine by those in the Spanish condition. The most controversial word barco, ‘boat’ - while grammatically
masculine, was classified as feminine by 6 out of 14 participants. However, based on the reasons given for such a classification, this is possibly due to dialectal differences and that there are several different words for ‘boat’ in Spanish:

<table>
<thead>
<tr>
<th>Reason</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>“LA lancha - artículo femenino”</td>
<td>“THE boat - feminine article”</td>
</tr>
<tr>
<td>“La canoa. ‘La’”</td>
<td>“The canoe. The”</td>
</tr>
<tr>
<td>&quot;LA canoa.&quot;</td>
<td>&quot;THE canoe.&quot;</td>
</tr>
<tr>
<td>“la barca, para ser un poco mas poéticos”</td>
<td>&quot;the boat(fem), in order to sound a little more poetic&quot;</td>
</tr>
<tr>
<td>“Ya que me ha venido a la mente antes barca que barco”</td>
<td>&quot;Since boat(fem) came to mind before boat(masc)&quot;</td>
</tr>
<tr>
<td>“La barca”</td>
<td>&quot;the boat(fem)&quot;</td>
</tr>
</tbody>
</table>

**Figure 5:** Responses for why Spanish participants classified “boat” as feminine

As predicted, the participants in the English condition classified objects much more randomly than the other groups. However, as stated earlier, there were some tendencies to strongly classify objects as masculine or feminine. The general explanations for these choices seem to be due to stereotypes: for instance, ‘house’ being stereotypically associate more with women than men. Similarly, ‘plate’ was also deemed feminine by the majority of participants because it is related to food and cooking, which again stereotypically and culturally have to do with women. Furthermore, physical characteristics of the objects had an influence on categorization. A common response for why participants categorized ‘key’, ‘fork’, and ‘bone’ as masculine was that these objects look phallic. Likewise, ‘table’ was described as “strong, sturdy, and hard”, which the participants explained are masculine adjectives.

Also as predicted, the English group performed better on the Social Attitudes Scale than did the other two groups. However, the results do not necessarily support Wasserman & Weseley (2009)’s findings in which the female participants exhibited more sexist attitudes than the male participants. The
researchers explained that disadvantaged groups - in this case women - have been shown to rationalize the society that oppresses them and therefore embrace their inferiority (Wasserman & Weseley 2009). In the present study, this was only true for those in the Spanish condition and even so, the mean scores differed by less than 1 point between the male and female groups.

Although the English participants expressed less sexist attitudes than did those in the Spanish and Russian conditions, it is relevant to note the stereotype-oriented responses in the justifications for their choices in the object classification task. These findings are similar to those in Boroditsky et al. (2002; cited in Boroditsky et al. 2003). The masculine and feminine adjectives as referenced at the beginning of this discussion are reflective of stereotypes and gender roles in society. The fact that “useful” is considered a masculine adjective while superficial words like “shiny” and “little” denote feminine qualities is glaringly problematic. The English participants in the present study used similar explanations: a table is “strong” and therefore masculine. Conversely, ‘plate’ was classified as feminine by a participant who explained that “plates are shiny and round-edged, which I associate with femininity”. However, ‘plate’ was classified as masculine by a participant that described it as a “utility object more than something of beauty”. Characteristics traditionally valued in women across cultures have to do with their appearance more so than being useful, productive members of society, an attribute traditionally valued in men. This demonstrates just how deeply rooted sexism is in our language and perceptions of the world.

Conclusion, Limitations, and Further Study

This study investigated whether speakers of languages with grammatical gender would classify objects according to their corresponding grammatical gender in that language and whether those
speakers expressed more sexist attitudes than speakers of a non-gendered language. The results support the first hypothesis that speakers of Spanish and Russian would tend to categorize objects based on the objects’ grammatical gender. However, the English group did not perform as randomly as initially supposed. This was possibly due to cultural stereotypes and the appearance of some of the objects, which were described by participants as phallic. The second hypothesis is supported in that English speakers achieved the highest scores on the Social Attitudes Scale while the Spanish and Russian groups scored lower.

Although the initial hypotheses are supported, it is worth noting that other variables such as culture were not controlled in this study. Therefore, the results may have been due to influence of culture rather than influence of language. To eliminate this possibility, it would be beneficial for future work to have all participants be from the same geographical area and socioeconomic class. Additionally, a larger sample size would yield a greater representation of the population and therefore strengthen the conclusions of the present study.

Certainly there would be need of great social and political reform to absolutely change existing gender inequalities, but further exploring the impact of grammatical gender across languages on the gender relations of men and women in society would be beneficial to raise awareness of this issue. Furthermore, based on the native English speakers’ reliance on stereotypes for gender categorization, the influence of other aspects of language on sexist attitudes - in addition to grammatical gender - would be worth investigating as well.

**Acknowledgements**

The objects for the classification task were drawn by graphic artist Kristin Holzer. Instructions
for all tasks and the Social Attitudes Scale were translated to Russian by Anastasiya Fatiy. Alfredo Oquendo assisted in editing the Spanish translations.

References


**Appendix A**

Passages for the reading task:

-- ¡Si alguien se asomara a la ventana..! -- chilló Hermione, mirando hacia atrás, hacia el castillo.

-- Huiremos -- dijo Harry con determinación--. Nos internaremos en el bosque. Tendremos que ocultarnos detrás de un árbol o algo así, y estar atentos.

-- ¡De acuerdo, pero iremos por detrás de los invernaderos! --dijo Hermione, sin aliento--. ¡Tenemos que apartarnos de la puerta principal de la cabaña de Hagrid o de lo contrario nos veremos a nosotros mismos! Ya debemos estar llegando a la cabaña.

Pensando todavía en las intenciones de Hermione, Harry echó a correr delante de ella. Atravesaron los huertos hasta los invernaderos, se detuvieron un momento detrás de éstos y reanudaron el camino a toda velocidad, rodeando el sauce boxeador y yendo a ocultarse en el bosque... (Rowling 2001).

-- А вдруг кто-то смотрит в окно... -- Гермиона оглянулась на замок.

-- Придется бежать, -- с решимостью сказал Гарри. -- И прямо в лес. Спрятаемся за деревьями и по наблюдаем.

-- Согласна, но побежим вокруг теплиц -- предложила Гермиона. --Чтобы из двери Хагрида нас тоже не было видно. Иначе нас нанесет кто заметит -- мы сами!

Так и не поняв, что она имела в виду, Гарри сорвался с места, Гермиона бросилась за ним. Они стремглав пронеслись мимо грядок с овощами к оранжерей, секунду выждали за ними и помчались во все лопатки дальше, обогнули Гремучую иву, спеша укрыться под пологом леса (Rowling 2002).

**Appendix B**
Objects for classification task:
## Appendix C
Social Attitudes Scale:

<table>
<thead>
<tr>
<th>English</th>
<th>Spanish</th>
<th>Russian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructions: Please rate the following statements from 1 to 5: 1 meaning you strongly agree, 5 meaning you strongly disagree and 3 meaning you are not sure.</td>
<td>Por favor, lea las siguientes declaraciones e indique del 1 al 5: 1 significando que usted está absolutamente de acuerdo y 5 significando que usted está totalmente en desacuerdo; 3 significa que usted no está seguro o neutral.</td>
<td>Оцените следующие предложения от 1 до 5. 1 значит что вы полностью согласны со мнением предложения.3 означает, что вы не уверены или не знаете. 5 означает что вы категорически не согласны со мнением предложения.</td>
</tr>
<tr>
<td>1. There is no more prejudice against women who work in America. *2. In 2014, it is more difficult for a woman to get and keep a job than in</td>
<td>1. Ya no existen prejuicios contra las</td>
<td>1. В Америке больше нету</td>
</tr>
<tr>
<td>Past years.</td>
<td>mujeres que trabajan en los Estados Unidos.</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>3. Women should not go where they are not wanted.</td>
<td>*2. En el año 2014, es más difícil para que mujeres obtengan y mantengan un trabajo que en el pasado.</td>
<td></td>
</tr>
<tr>
<td>4. Women should wait for change, because change will come if they are patient.</td>
<td>3. Las mujeres no deben ir donde ellas no están aceptadas.</td>
<td></td>
</tr>
<tr>
<td>*5. If business were fair, men and women would have an equal chance to get a job.</td>
<td>4. Las mujeres deberían esperar un cambio porque el cambio vendrá si ellas son pacientes.</td>
<td></td>
</tr>
<tr>
<td>6. It would be difficult to work for a female boss.</td>
<td>*5. Si en el mundo de los negocios fueran justos, los hombres y las mujeres tendrían una oportunidad igual para obtener un trabajo.</td>
<td></td>
</tr>
<tr>
<td>7. Women complain too much about the inequality between men and women.</td>
<td>6. Sería difícil trabajar para un jefe femenino.</td>
<td></td>
</tr>
<tr>
<td>8. The government has given too much to women recently.</td>
<td>7. Las mujeres se quejan demasiado sobre la desigualdad que existe entre hombres y mujeres.</td>
<td></td>
</tr>
<tr>
<td>9. Money is wasted on women who attend expensive colleges because they will quit their jobs to raise their children.</td>
<td>8. El gobierno les ha dado demasiado a las mujeres recientemente.</td>
<td></td>
</tr>
<tr>
<td>10. In order to be fair, businesses hire women who are not competent enough to do the job.</td>
<td>9. El dinero está malgastado por las mujeres que asisten a universidades prestigiosas porque ellas abandonarán sus trabajos para criar a sus niños.</td>
<td></td>
</tr>
</tbody>
</table>

| 10. In order to be fair, businesses hire women who are not competent enough to do the job. | 10. Para ser justos, los negocios emplean a mujeres que no son tan competentes para hacer el trabajo. |

| 10. In order to be fair, businesses hire women who are not competent enough to do the job. | 10. Para ser justos, los negocios emplean a mujeres que no son tan competentes para hacer el trabajo. |

An asterisk (*) indicates item was reverse-scored.