Gender stereotypes and inclusion in language teaching

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Abstract   Example sentences are a major source of data in language teaching. We use examples in our teaching to support students' learning, both in textbooks and in more informal contexts such as classroom instruction and small-group work. This paper is concerned with the representation of gender in such examples. We introduce our prior work on the use of examples in Linguistics research articles, showing that they exhibit pervasive biases and stereotypes of all genders. We offer recommendations to avoid such biases, to encourage student participation and send a message of inclusion in the classroom.

1   Introduction

Example sentences are a central tool in the presentation of new concepts and grammatical phenomena in language teaching and research. This paper is concerned with how example sentences are constructed, focusing in particular on the representation of gender in such examples. We introduce our prior work on the use of example sentences in Linguistics. Like in Foreign Language Teaching, example sentences are used extensively in Linguistics to illustrate grammatical phenomena, their various use cases, and limitations on their distribution. However, we show that the example sentences presented in Linguistics research articles exhibit pervasive biases and stereotypes. Among other findings, men outnumber women in examples at a 2:1 rate and are further overrepresented as grammatical subjects and agents. Men are portrayed as violent, angry individuals with jobs, while women are family-oriented passive actors in a male world. Moreover, example sentences perpetuate heterosexual cisgender norms, unnecessarily assume a gender binary, and over-represent Western cultural practices. In the remainder of this paper, we briefly survey our findings in Kotek et al. (2020, 2021) in section 2, discuss implications of this work for the construction of example sentences in teaching and research in section 3, and present recommendations for language teachers and linguists in section 4.

2   Example sentences in linguistic textbooks and journal articles

In the course of language-related teaching and research, practitioners make extensive use of example sentences to illustrate phenomena of interest. For example, an author might use examples such as (1a–d) to illustrate differences between how definiteness is marked in Hebrew vs. English. In (1a–b), contrasting Hebrew examples are presented with a morpheme-by-morpheme English gloss, following the standard representation of such examples in the linguistics literature. In (1c–d), the equivalent English translations are presented for comparison.

(1) a. ha-yeled ha-blondini ha-gavoha
         the-boy   the-blonde   the-tall

     b. yeled blondini gavoha
         boy   blonde   tall

     c. The tall blonde boy

     d. A tall blonde boy

Over the past two decades, some attention has been given to the form of example sentences such as (1). In a landmark study, Macaulay and Brice (1994, 1997) analyzed examples in eleven syntax textbooks and concluded that "the majority of constructed example sentences in syntax textbooks are biased toward male-gendered [Noun Phrases], and [...] contain highly stereotyped representations of both genders." Twenty years later, Pabst et al. (2018) conducted a follow-up study that found most problems identified by Macaulay and Brice (1997) remained unchanged.

In Kotek et al. (2020, 2021) we examine gender representation in primary research by examining all example sentences in papers published in three leading linguistics journals: *Language*, *Natural Language & Linguistic Theory*, and *Linguistic Inquiry* between 1997–2018. The resulting corpus comprised 1,126 articles with a total of 30,591 example sentences, which were manually coded by a team of undergraduate research assistants. Here we summarize a few major findings as presented in Kotek et al. (2021).

We find that male-gendered arguments are over-represented at a 2:1 ratio across the sample, as presented in Fig. 1a, and that this skew is present in all the years examined. This disparity is even more pronounced among grammatical subjects: male-gendered subjects outnumber female-gendered subjects at a ratio of 2.4:1. Conversely, the ratio among grammatical objects is only 1.7:1. These differences, shown in Fig. 1b, indicate that compared to the corpus as a whole, male-gendered arguments are even more likely to occur as subjects, and female-gendered arguments are even more likely to occur as objects.
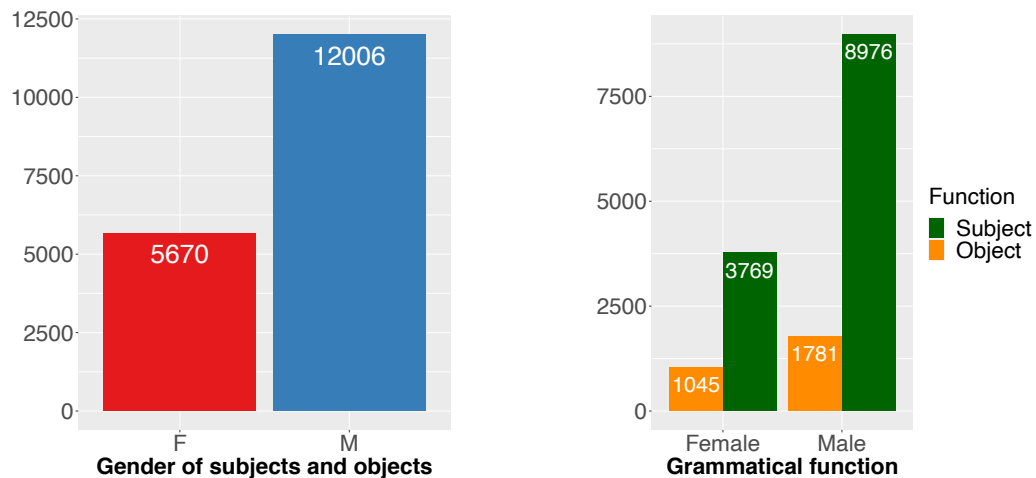

Figure 1: Overall number of arguments (a) by gender and (b) by gender and grammatical function (subject and object)

We find additional biases manifesting according to gendered stereotypes, such as

those presented in Figure 2. Male-gendered arguments are four times as likely to be engaged in violent activities compared to female-gendered ones. On the other hand, 57% of all arguments described using kinship terms are female – e.g., "wife", "mother", "daughter." Given the 2:1 male skew in the entire sample, this context shows a striking over-representation of female arguments.
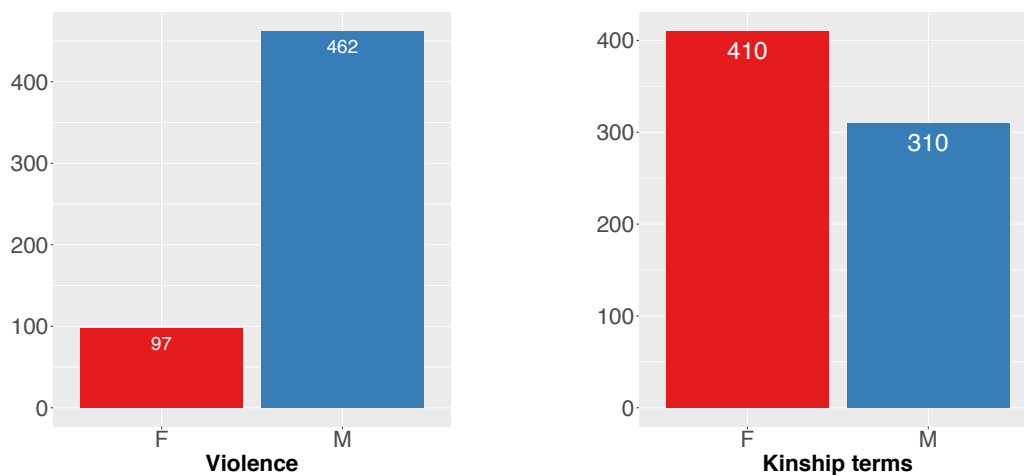

Figure 2: (a) Gender of arguments in sentences involving violence. (b) Gender of arguments described using kinship terms.

Additional findings follow similar gendered patterns. Male arguments are more likely to be described as having an occupation, and female arguments are more likely to be mentioned in romantic or sexual contexts. Examining the distribution of arguments in romance-related sentences more closely, subjects were 1.3 times more likely to be male, whereas objects were 1.7 times more likely to be female; that is, female arguments tended to be on the receiving end of a male's affection or gaze. We further find that female arguments are more likely to exhibit positive emotions such as joy and trust, while male arguments tend to exhibit negative emotions such as fear and anger. Importantly, these findings were consistent regardless of whether the example was given in English or in another language. We refer the reader to Kotek et al. (2021) for a full survey of our findings.

Example (2) provides a handful of specific examples of the types of sentences we find published in leading linguistics journals:

(2)   a. John ate the meal and Mary cleaned the dishes
      b. John told Bill that Mary began to cry without any reason
      c. Tomas replaced Ricardo as the captain
      d. Joan believes he is a genius even more fervently than Bob's mother does

3 The importance of better constructed examples in language teaching

Constructed examples sentences are one of the main sources of data in both linguistics and language teaching. Examples are used not only in textbooks but also in more informal contexts such as formal and informal classroom instruction and small-group practice. As teachers, we use these examples to illustrate phenomena of interest to support our students' learning efforts. However, we often ignore the social aspects that these examples occur in and that they exemplify.

Specifically, we take the makeup of example sentences to be signals to our students about what we take the world to be like: who is a free-thinking agent; a genius; a professor or a student; and the recipient of others' actions or belongings; the object of their affections; a caregiver; a spouse. Although often subtle in any single example, in the aggregate the bias is clear. It sends a powerful message about who is welcome in our classrooms and who is less so, and has the potential to negatively affect the learning outcomes of our students.

In their discussion of gender bias in economy textbooks, Polanyi & Strassmann (1996) examine the case studies in those books and argue that gender-biased examples act as gatekeepers in the discipline. Along similar lines, in a study on gender identity and gendered spaces in universities and colleges, Thorpe (2017) shows that structural binarism and cissexism otherize genderfluid and nonbinary identities and leads to their erasure.

We illustrated in sections 1–2 how example sentences used in the linguistic literature may encode implicit biases (even at a very subtle level, observable most clearly only when an entire journal paper or textbook is examined on the whole). These trends do not occur in isolation: rather, they reflect biases that are prevalent across our society at large. For example, studies have found similar biases in English language textbooks for various dialects of English and in example sentences in French linguistics journals. It has featured in discussions of the representation of gender more broadly, including in reference to language acquisition, in fairytales, and in children's books.

Nonetheless, as educators, we believe that we can and should strive to avoid perpetuating bias, including implicit bias, in our language research and teaching. We argue here that presenting better example sentences, using inclusive language, can send an important message to students. This can encourage their participation in the classroom and in our fields, and lead to improved outcomes for all students.

4   Toward equality in gender representation

In Kotek et al. (2020, 2021) we provide linguists with a variety of recommendations for how to be more inclusive in their creation and use of example sentences. In this section we review the recommendations most relevant to foreign language teaching and offer additional ones specific to this context.

Example sentences present an excellent opportunity to send a message of inclusion to one's students and thus encourage everyone's participation and feeling of belonging. To that goal, be mindful of the composition of your example sentences and the distribution of nouns in them: ensure that male-denoting nouns aren't over-represented and avoid stereotypes about all genders. Specifically, ensure that male-denoting nouns are not over-represented as subjects and actors in your sentences, and the female-denoting nouns aren't passive recipients of others' affection, gaze, or belongings. Avoid using sexually explicit or demeaning language.

Embrace diverse names and representations of the protagonists in your examples, including non-Western names and those used more frequently in non-binary and non-heterosexual communities. Your examples could serve to send a message about the diversity of races and ethnicities. Consider explicitly adding names and cultural references from under-represented speaker groups of your target language. More generally, think past the first names and representations that come to mind when you ask yourself who to feature in your examples. Sources for diverse names include the database of names compiled by Sanders et al. (2020), which provides names for every letter of the English alphabet from different languages and cultures, categorized by gender (feminine, masculine, non-binary), and Kirby Conrod's list of non-binary names.[1]

Avoid the use of gendered lexical items such as -man and he where unnecessary. Use inclusive nouns such as English Congressperson and humankind instead. In languages with explicit gender marking, be mindful of the choice of nouns and verbs you use. If there is no gender-neutral pronoun, consider alternating the choice of pronouns and corresponding nouns in your examples. Although the male pronoun is often said to also act as the gender-neutral pronoun in many languages, keep in mind that it is often not interpreted as such by listeners. Instead, this use perpetuates biases and over-representation of male points of view.

In English, adopt and encourage the use of singular they, as a more inclusive pronoun when referring to (singular) nouns whose gender is unknown. Moreover, consider using

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[1] https://docs.google.com/spreadsheets/d/1GF6c5qFFzTqYGukRYia8WcSam48tBHm_R6MJB5tJPiI/edit#gid=0

singular they even when the argument's gender is known but is irrelevant to the example. Along similar lines avoid translating non-gendered terms in languages that do not make use of gender marking, such as English, into stereotypically gendered terms in the target language. For example, the English noun doctor could refer to male and female (and non-binary) individuals, and so can nurse. Avoid translating the former into a male form and the latter into a female form, unnecessarily adding gender-based assumptions where none previously existed. Be mindful of over-using the male forms in such cases as well.

Finally, although you may be required to teach the "standard" (mainstream) variety of your target language, consider discussing other language varieties explicitly in your teaching, especially in more advanced courses. This should include a discussion of the speaker groups who use different language varieties and their customs, if different from the dominant variety, as well as phonological, lexical, and grammatical variation.

Although our study was immediately concerned with examples in theoretical linguistics, in many ways we believe that these findings may have a greater positive impact in foreign language teaching. Journal papers are read by linguists and some example sentences are cited in subsequent work. However, foreign language teachers work directly with learners, and have them recite and practice with example sentences. As a result, small changes can have a more immediate positive impact on these learners.

On the other hand, the perpetuation of stereotypes and biases in teaching materials, even if subconscious, could have a corresponding negative effect on the foreign language learner. It can affect their perception of whether or not they are welcome in the language-learning setting. Many of these small moments can easily go unnoticed by those whose world is accurately reflected by this bias, but they add and compound in the world of those who are excluded.

In sum, remember that as a teacher, you are in a position of authority and can have a positive influence on your students and the language community as a whole. Be sensitive to how you portray all individuals in your examples and what implicit messages these examples are sending.

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