### Building equity, diversity and inclusion in courses: A case study in linguistics

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Linguists have come to a general consensus that **all languages and all language varieties are valid**, not just as objects of study within linguistics, but **as ways of using language**.

However, society doesn't pay very much attention to what linguists have to say, so many languages are marginalized, disadvantaged, stigmatized, and oppressed in various ways:

- non-standard dialects
- sign languages
- minoritized languages
- Indigenous languages

And since university instructors are part of society, our teaching is shaped by the same biases and can perpetuate them.

We are often subject to **external institutional biases**, such as being expected to promote and evaluate student fluency in standardized English, which disproportionately disadvantages minoritized students, immigrants, students with learning differences, poorer students, etc.

Our own individual **unconscious biases** can lead to common linguistic microaggressions, such as mispronouncing a minoritized student's name or misgendering or deadnaming a trans/non-binary student. These microaggressions can have severe detrimental effects on a student's mental health and academic success (Kohli and Solórzano 2012, Bucholtz 2016, Russell et al. 2018, Cochran 2019, McMaster 2020).

Language-based biases also permeate academic discussions about language, in linguistics and in other fields.

Example sentences often reinforce **unjust hierarchies and stereotypes**, such as those concerning gender and culture (Macaulay and Brice 1997, Pabst et al. 2018, Richy and Burnett 2019, Kotek et al. 2020).

For example, we find that female participants in example sentences are more likely to be unnamed (often described only by their relationship to a male participant) and to have less active roles, as in *Slavko left his wife*.

We also often discuss **spoken language as the default**, leaving students with minimal understanding of sign languages or Deaf communities.

Within linguistics, there have been many recent calls to action for increased attention to issues of social justice in our field (Rickford and King 2016, Leonard 2018, Conrod 2019, Charity Hudley 2020, etc.). This project follows in that spirit, with a focus on teaching.

We single out teaching here specifically because that is where we begin training the next generation of scholars. No matter how aware we might be of our language-based biases, if we do nothing about them, we will pass them on to our students.

Professor Nathan Sanders worked with Professor Keren Rice and Professor Naomi Nagy, in consultation with other members the Department of Linguistics more broadly, to write a seed grant for the Learning & Education Advancement Fund through the Faculty of Arts & Science, titled "Innovations in Linguistic Equity, Diversity, and Inclusion in the Linguistics Curriculum and Beyond".

The LEAF grant was approved, and for three years beginning with the most recent academic year (2019–2020), we have funding to pay for two full-time graduate student positions (Lead Equity, Diversity, and Inclusion Teaching Assistants). The first two Lead EDI TAs to be hired were **Pocholo Umbal** and **Lex Konnelly**, who have continued with the project into the second year.

The main goals of our EDI initiative are to:

- raise explicit awareness of language-related bias in course content
- diversify data away from major spoken European languages
- create more inclusive and welcoming learning spaces
- build a repository of resources and tools for instructors
- bring in guest speakers

For the first year, our primary strategy was to collaborate with instructors for two courses per semester to devise individualized approaches that suited their needs, while also satisfying our goals, though we also worked on projects behind the scenes separate from specific courses.

In the second year, we are expanding our scope beyond UofT and beyond linguistics. For example, we are working with **Professor Carol Percy** for addressing language-based biases in English, and we are working with **Professor Catherine Anderson** of McMaster University to explore what kinds of EDI-related issues linguistics students encounter in our new pandemic-induced online learning environment.

### Component #1: Course content

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Working with Nathan's introductory phonetics course in Fall 2019, we expanded three weeks of the course material to bring an explicit focus to **language-based bias as content** the students were expected to learn and be assessed on.

### Component #1: Course content (a)

First, in a unit on modelling vowel acoustics, we added content concerning **gender diversity** to problematize the notion of "typical male/female" vocal tracts.

Linguistics courses often teach students to calculate resonant frequency of the vocal tract using a default of 17.5 cm vocal tract length, with this length sometimes called "typical" (Gobl and Ní Chasaide 2010:380) or "average" (Behrman 2018:216) or "neutral" (?!) (Howard and Angus 2017:225) for adult males.

This perpetuates male as a default (already a problem in the sciences) and obscures body diversity within and across genders.

### Component #1: Course content (b)

Then, in a unit on auditory perception, we added content concerning the **effect of social biases on speech perception**.

Speech perception is often taught very mechanically, with primary or sole focus on the physical functions of the auditory canal, the inner ear, the cochlea, etc. However, there is much research showing that social information also plays an important role in perception, so we cannot rely on auditory perception alone.

For example, native speakers of Canadian English are perceived as less intelligible if they are Chinese and their faces are visible; the effect goes away for white speakers, or when Chinese faces are hidden (Babel and Russell 2015). This has many social impacts that students need to be aware of, for example, in how they may subconsciously rate racialized instructors worse than white instructors.

### Component #1: Course content (c)

Finally, in a unit on sign language phonetics (itself an addition Nathan had made before this initiative), we added content concerning how sign languages are often minimized or excluded in linguistics.

Spoken languages are the assumed default in linguistics. Linguistics courses are regularly taught with no significant discussion of sign languages, but analogous courses with no significant discussion of spoken languages are rare, and where they do exist, they are usually overtly marked with "sign language" in the course title ("sign language phonetics", etc.).

### Component #1: Course content (c)

In addition, it is quite common for an undergraduate linguistics major to never even work with any sign language data at all, but the reverse, for an undergraduate major to never work with any spoken language data, would be viewed by most linguists as highly improper.

This attitude implicitly treats sign languages and Deafness as atypical phenomena that can be minimized or even outright ignored. By extension, it implies that Deaf people can be ignored.

Component #2: Diverse data

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We also worked with **Professor Peter Jurgec** for his introductory phonology course in Fall 2019.

In this course, our focus was on replacing or supplementing data away from major standardized European languages.

In addition to creating new ordinary phonology datasets from languages such as Cantonese, Sundanese, and Tagalog, we also created datasets demonstrating sociolinguistic variation and change in lesser-studied language varieties such as Faroese, Ganluo Ersu, and Toronto Heritage Russian.

Component #3: Inclusive classroom practices

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We also organized **workshops** with instructors and teaching assistants in both courses in Fall 2019 to discuss best practices for teaching a diverse student body.

Our focus was two-fold. First, **general social respect** for students: their gender, name, etc.

But given that we are linguists, we also wanted to highlight how to respect a student's linguistic background, especially with an eye towards **empowering students as language experts**.

We are also planning to store our materials in an **online repository**, so that other instructors across the world can use them.

In addition to the lecture notes, datasets, and homework problems we have worked on with instructors last year, we are also working to build databases to help linguists construct more diverse and inclusive example sentences.

We are in the midst of building a **database of names** for each letter of the English alphabet. These names come from a variety of languages and cultures, categorized by gender (feminine, masculine, non-binary), and are being confirmed with native speakers:

feminine	masculine	non-binary	language
Anuhea	Akoni	Akela	Hawaiian
Bayarmaa	Batzorig	Batu	Mongolian
Chana	Chayim	Chesed	Hebrew
Damla	Demir	Deniz	Turkish
Eirian	Elwyn	Eryl	Welsh
:	:	:	÷
Zuriñe	Zuzen	Zorion	Basque

We also plan to build a database of predicates and sentence frames, categorized by argument structure and other relevant syntactic and semantic properties.

Our goal is to select predicates and sentence frames that avoid the more problematic and offensive types that linguists often gravitate to: violence, gender stereotypes, etc.

## Component #5: Expert guest speakers

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Beginning this year, we are inviting **guest speakers** to address various aspects of social justice and its relationship to linguistics. Our first speaker is Professor Anne Charity Hudley from the University of California, Santa Barbara, who is scheduled to speak in a few weeks (9 October 2020).

Professor Charity Hudley is a leader in the issue of inclusion in linguistics, and her work was a primary inspiration for this project, so we are excited to have her (virtually) visit to talk about her work.



Time management and advanced preparation are key.

First semester went fairly smoothly, because we had time before the semester began to brainstorm ideas and make an action plan.

Second semester was rougher. The time between semesters is both very short and suboptimal for work (holidays, travel, family, etc.).

Thus, it's crucial to **start planning out the entire year during the summer**, rather than trying to plan one semester at a time.

### The nature of the course matters.

Some courses are already naturally predisposed to discussing issues of language-based biases, so we didn't even bother targeting them in the first year.

Phonology was fairly easy to work on, because datasets are generally easier to find and work with by non-experts.

**But syntax is hard!** We worked with **Professor Susana Béjar** for her introductory syntax course in Winter 2020, and it was difficult to find datasets that could be easily slotted into her materials.

And semantics is harder! We worked with Professor Guillaume Thomas for his introductory semantics course in Winter 2020. The goal here was to think more broadly about how semantics is taught. The language of instruction is also often used as the object language for analysis, which can be difficult for second-language learners, especially if they are expected to make subtle judgments in meaning that even native speakers struggle with.

### Expertise matters.

Phonetics and phonology also happened to be easier because the three of us have more collective expertise in those fields than in syntax and semantics. This made it easier for us to judge how best to adapt our initiative to the relevant courses.

### Buy-in matters.

And obviously, this won't work without instructor buy-in. As PI of this initiative, I am fully committed, and we are grateful that Professors Jurgec, Béjar, and Thomas happily volunteered to participate last year, as well as Professors Percy and Anderson who we are working with this year. Without their buy-in, this would have been a lot more difficult. We are also fortunate that our department as a whole has been enthusiastic and supportive.

### Funding helps.

The most important reason this initiative has succeeded is because of Lex and Pocholo's many hours of hard work, work they could not have done (and I would not have asked them to do) without proper financial compensation.

Thanks to the Faculty of Arts & Science for even having a grant program that funds projects like this!

**Wrap-up:** We have provided pieces of a model that we hope will inspire you to think about ways to combat language-based biases in your own teaching. As we have shown, there are many ways to address these issues: content, data, methods, tools, experts. Pick and choose what works for you!

**Caveat:** We don't have all the answers. There are pieces of the puzzle we're missing, and there are surely some we're getting wrong. There are countless manifestations of bias and countless valid solutions. No one group or individual can do this perfectly. This is a communal effort, and we must all contribute and support each other.

### Thank you!

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