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## Gendered Translations: Working from ASL into English

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### Cover Page Footnote

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# Gendered Translations: Working from ASL into English

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## ABSTRACT

American Sign Language (ASL) is a visual-spatial language that differs from spoken language, such as English. One way is in the use and characteristics of pronouns (Meier, 1990). Pronouns in ASL, for example, are created by pointing to objects or locations in space (written in English here as POINT), and do not have a gender assigned to them as they do in English (he, she, him, her). So, where it is not specified in ASL, interpreters must decide how to interpret pronouns into English. Limited research has been done on this topic (Quinto-Pozos et al., 2015), and so a study was created to address this gap. A cohort of 22 interpreters volunteered to translate four stories from ASL into English concerning four different occupations: engineer, truck driver, elementary teacher, and secretary. The first two were chosen as professions most frequently employing men and the latter most frequently employing women (Bureau of Labor Statistics, 2018). The researchers compared the number of references in the ASL stories (POINT) to the number of pronouns included by the interpreters and looked at the gender, if any, the interpreters assigned. The findings of this study indicate 11 different strategies for dealing with the gender-neutral POINT, where the use of “they” was most frequent. No one used “he or she” nor the more recent non-binary, gender-neutral “ze.”

## INTRODUCTION

American Sign Language (ASL) is a visual-spatial language that is different from English in several ways. One is in the use and characteristics of pronouns (Meier, 1990). Pronouns in ASL, for example, do not have a gender assigned to them as they do in English (he, she). So, interpreters must determine whether to fix the gender of pronouns or choose another strategy when they work. But how do they decide which gender to choose? The following review of the literature concerning English third-person singular pronouns and followed by a discussion of the relevant research on ASL-English interpreters.

## ENGLISH PRONOUNS

Gender can be assigned to objects based on three processes, through the use of pronouns (he/she), at the level of grammar, or socially (Nissen 2002). Examples of grammatical assignment include the French use of “un/une” or “le/la” representing the masculine and feminine respectively.

Grammatical gender is also indicated by changes in the morphology of a word such as “acteur/actrice” or in English “salesman/saleswoman.” In English, the use of socially determined pronouns includes the use of “she” for objects like ships (“the Queen Mary”) or countries (“Great Britain”) (Marcoux, 1973), “abstract nouns, such as liberty and mercy” or is associated with certain activities or occupations, where a nurse may be thought of as female (Neufeld, 1990, p. 742).

English lacks a gender-neutral third person singular pronoun for people (Balhorn, 2009). Historically there has been a push for “he” or “they” (Bradley, Schmid & Lombardo, 2019; Lindqvist, 2018), though it has been argued that English language users may not realize or agree that “he” designates gender neutrality (LaScotte, 2016). Authors have noted ongoing debates about what to do to create a gender-neutral third person singular pronoun (Bradley et al., 2019).

### **MALE DOMINANCE THEORY**

More recently, there has been a push to reject gendered and binary identifiers and this is tied to pronoun use (Bradley et al., 2019; Darr & Kibbey, 2016). Individuals may identify in a number of ways, such as “transgender woman, transgender man, non-binary person, and genderqueer person” (Darr & Kibbey, 2016, p. 74).

The movement to use “he” or supposedly neutral terms such as “chairman” for example as a gender-neutral third person has been characterized as sexist (Bradley et al., 2019) and androcentric (Lindqvist, 2018). In a recent study, it was found that even machine translation programs have a bias, as the programs were fed associations like “police officers” as typically “men” or “nurses” as “women” based on the inputted corpora (Cho et al., 2019). Various studies have found that the use of gender-neutral terms “the applicant” or “they” did not reduce male dominance bias (Lindqvist, 2018) nor the use of “he” (Miller & James, 2009).

In a recent study, participants were asked if various sentences could refer to a female and the gender neutral “he” was employed. They included examples like, “When a botanist is in the field, he is usually working” (Miller & James, 2009, p. 485). The correct answer was “yes” in every case, yet there was an 87% error rate across the experimental sentences. It seemed that the participants did not feel an occupation or activity related to women when the supposedly gender-neutral “he” was included as an antecedent (Miller & James, 2009).

### **GENDER NEUTRALIZATION**

There has been a push to gender neutralization. The process has been described as ideological, in that it legitimized former “taboo categories of identity” (Darr & Kibbey, 2016, p. 74). Neutralization strategies include:

1. Feminization or shifting the definition, where previously male dominated pronouns such as “chairman” is replaced by “chair” or “chairperson” (Balhorn, 2009; Bradley, Salkind, et al., 2019; Lindqvist, 2018),
2. Use of second- or first-person plural pronoun such as “you” (LaScotte, 2016) or “we” (Marcoux, 1973)
3. Use of indefinite pronouns “someone,” “anyone” (Balhorn, 2009) or “one” (Bradley, Schmid, et al., 2019),
4. Repetition of the noun (LaScotte, 2016)

5. Use of “he or she,” which may assume a binary (Bradley, Schmid & Lombardo, 2019) and which is “cumbersome” (LaScotte, 2016)
6. Pluralization of the nouns (LaScotte, 2016) so that “the student” becomes “students”
7. Use of paired forms such as “waitress/waiter” (Lindqvist, 2018), or
8. the avoidance of pronouns altogether (Bradley, Schmid, et al., 2019; LaScotte, 2016).

In an effort to neutralize pronouns, authors also identified a push to use “they” for singular, third person pronouns (Darr & Kibbey, 2016). Some concern was raised that it was seen as meaning plural “they” (Bradley, Salkind, et al., 2019) and that it was interpreted as “male” (Lindqvist, 2018), though other authors disagreed and found it was gender-neutral and was used for both gender conforming and gender nonconforming references (Bradley, Salkind, et al., 2019)

Authors have also advocated for the creation of new pronouns (Bradley, Salkind, et al., 2019). These included “ze,” “ve” and “xe” (Lindqvist, 2018) or “sie” and “hir” (Darr & Kibbey, 2016) though the latter two were deemed feminine pronouns (Darr & Kibbey, 2016). Other suggestions were “Ne/nem/nir/nirs/ nemsself” (Darr & Kibbey, 2016). None have become widely used (Bradley, Salkind, et al., 2019) (Darr & Kibbey, 2016). Of these, it was believed that “ze” is the most well-known or common (Darr & Kibbey, 2016; Lindqvist, 2018) and its derivations include “ze/zir/zir/zirs/zirself” (Darr & Kibbey, 2016). There is, however, ongoing resistance to change, perhaps due to sexism or transphobia (Bradley, Schmid, et al., 2019). It has been argued that exposure and support from the authorities is needed for widespread use (Bradley, Schmid, et al., 2019).

## **PRONOUN RESEARCH**

A number of empirical studies have been done on the gender or pronouns assigned to different antecedents. One finding was that individuals often demonstrate some degree of inconsistency in pronoun assignment (LaScotte, 2016; Marcoux, 1973). Participants, for example, may have initially used “she,” but then revert to “him” or “them” later on.

Lindqvist (2018) conducted two studies of pronouns and looked at three conditions, paired forms (he/she), neutral words such as “the applicant” and the use of recently created gender-neutral “ze” in English and “hen” from Swedish. The research volunteers read a summary about a hypothetical applicant which included one of the pronouns or antecedents and then paired that to a photo taken from a selection of typically male, female or non-binary individuals. This method of pairing photos was used in a number of other studies (Bradley, Salkind, Moore & Teitsort, 2019; Bradley, Schmid & Lombardo, 2019).

In another study, Balhorn (2009) focused on five American newspapers in 2006 and examined the Proquest citations and abstracts generated for the articles from that year. In a third, LaScotte (2016) examined the pronoun use of volunteers when writing about “the ideal student.” They also had to choose from a list of pronouns to fill in a missing pronoun in a cloze task. In a fourth, Miller and James (2009) had participants read 35 sentences about a person engaged in various activities or occupations and then asked if the sentence could refer to a female.

Findings included that paired forms (“he or she”) or the recently created pronouns like “hen” seemed to reduce the male gender bias (Lindqvist, 2018). However, gender-neutral

constructions like “the applicant” still seemed to have a male bias (Lindqvist, 2018). Photos of masculine looking individuals were more often were assigned a gender of “he” while the pronoun “she” was paired about equally with either feminine or non-binary photos (Bradley, Salkind, et al., 2019).

Research on “they” found it was in fact most often used to represent a singular or plural non-gendered third person reference (Balhorn, 2009; Bradley, Schmid, et al., 2019; LaScotte, 2016). It was considered gender-neutral and was acceptable for use even for photos of non-binary, gender-nonconforming photos. (Bradley, Salkind, et al., 2019). Participants recognized it was ungrammatical but prevalent and acceptable in informal oral discourse (LaScotte, 2016). It was also less cumbersome to produce than “he or she” (LaScotte, 2016).

Studies also found that “he or she” was used for singular third person reference, though less often than “they” (Balhorn, 2009). While one study found no male bias in the use of “he or she” (Lindqvist, 2018) in another, the research participants felt this construction was not as inclusive as “they” nor representative of non-binary individuals (LaScotte, 2016). In a study of American newspapers, “he or she” was more often used for antecedents that were sex-stereotyped (like “policeman,” “engineer”) than for neutral antecedents (like “student,” “member”) and statistically less often for indefinite pronouns as antecedents (like “someone,” “anyone”) (Balhorn, 2009).

Other studies noted the use of other pronouns for third person singular non-gendered. They included indefinite pronouns like “one” or “someone” (LaScotte, 2016). “You” was another option (LaScotte, 2016). “He” was also used but not statistically frequently (LaScotte, 2016).

Researchers looked at “ze” and noted how it was not familiar to English language users (Bradley, Salkind, Moore & Teitsort, 2019; Lindqvist, 2018). There was some question if it was reserved for use only with non-binary identities (Lindqvist, 2018). In one study, there also seemed to be a male bias for “ze” (Bradley, Salkind, et al., 2019) though in another, such a bias was not noted (Lindqvist, 2018).

## ASL PRONOUNS

Like any language, ASL makes use of a system of pronouns to refer to the speaker and addressee, both present and absent. One type of pronoun is the act of pointing with an index finger. This can mean “me or I” if the signer directs the sign to his or her (or their) chest. It can mean “you” when pointed at the person the signer is directing their comments to. Or historically it has been interpreted as meaning “he, she, it” when directed at a third person or object. This pointing behavior can be represented in written English as POINT.

An interesting fact about ASL pronouns is that they are not marked for gender. Thus, when a Deaf signer uses them in ASL, an interpreter must decide how to translate the sign into spoken English. Below is an example of an ASL discourse and potential interpretation into English.

### **Example 1.** ASL Pronouns

American Sign Language: BOB: HEY WHAT DOCTOR SAY?

Translation: What did the doctor say?

American Sign Language JACK: **POINT** (to the right) TOLD (towards signer) **POINT** (to chest) FINE.

Translation: **He/She/They/Ze/The doctor** told **me** that **I** was fine.

### **GENDER TRANSLATION STRATEGIES**

Interpreters and translators of spoken languages can face the same challenge as sign language interpreters when it comes to pronouns. Authors have noted that due to different social or ideological norms, translations can vary across languages in terms of gender (Nissen, 2002). A person working as a “cook” and unidentified for gender could be represented by a masculine pronoun in one language but more often by a feminine pronoun in another (Nissen, 2002). The level of formality in some languages can also impact pronouns, where it was noted in a study of machine translation that informal antecedents were translated as female (Cho, et al., 2019).

To translate differences in gender, several strategies have been suggested. They include the use of a synonym with the same gender, the use of a word from another language (such as *sol* and *luna*) that has the same gender as the original, or thirdly the use of a footnote (Nissen 2002). Gender neutral pronouns can also be used, but the translator must be aware that there could be a loss of information or specificity (Cho, et al., 2019).

### **ASL INTERPRETER RESEARCH**

To date very little has been done on this topic and nothing specifically about the translation of the ASL pronoun **POINT** into spoken English. Several authors have looked at the issue of gender (Artl, 2015; Jones, 2017; MacDougall, 2012). For example, Morgan (2008) hypothesized a number of differences between the work of male and female interpreters in terms of word choices. Some authors have suggested female interpreters could make use of powerless language (Artl, 2015; McIntyre & Sanderson, 1995). But overall, there is recognition that much more research is needed (McIntyre & Sanderson, 1995; MacDougall, 2012).

In perhaps the only study to date of the translation process and gender, Quinto-Pozos, Alley, Casanova de Canales, and Treviño (2015) examined interpreters working in video relay services translating between ASL and Spanish and English. In their study, they focused on nouns that could be gendered and found the interpreters often used masculine forms in Spanish for words like “amigo” versus “amiga” when the signer used the ASL sign **FRIEND**. In addition to that strategy, they found three others where the interpreters sometimes used a more gender-neutral construction such as “the friend,” or passive voice where they deleted the agent altogether, or a superordinate term acting as a synonym such as “person” for friend (Quinto-Pozos et al., 2015, p. 227).

### **RESEARCH QUESTIONS**

Given the lack of research into the translation of pronouns from ASL to English, this study was designed to address this gap. Based on the literature review, the following research questions were posed:

1. What strategies do sign language interpreters use to translate pronouns from ASL into English?

- To what extent do sign language interpreters rely on gender stereotypes in selecting English pronouns for ASL references?

**METHOD**

This study used a mixed methods approach by examining the frequency of pronoun use by a small cohort of interpreters (quantitative data) and the participants’ response to questions during a structured interview process (qualitative data).

**PARTICIPANTS**

A group of 22 sign language interpreters were recruited through a mass email to the database of the Registry of Interpreters for the Deaf. The following table (Table 1, Demographics) outlines their demographic information. Twenty-one identified as “hearing” and one replied “non-deaf.” Similar to the findings of earlier studies, there was a high number of participants who identified as female (Cokely, 1984; Stauffer et al., 1999) and a limited number of participants who identified as other than White/Caucasian (Stauffer et al., 1999). All were nationally certified by the Registry of Interpreters for the Deaf.

**Table 1.** Demographics

<b>Age</b>	Mean = 48	Range = 25 - 65				
<b>Gender</b>	Female	Male	Trans			
	19	2	1			
<b>Ethnicity</b>	White/Caucasian	African American/Black	LatinX			
	20	1	1			
<b>Highest Education</b>	No degree	AA/AS	BA/BS	MA		
	7	6	8	1		
<b>Primary Work Setting</b>	Community	Post-Secondary	VRS	K-12	Other	
	8	6	3	1	4	
<b>Certification</b>	Registry of Interpreters for the Deaf	Board for Evaluation of Interpreters	State Licensure	RID K-12	Ed. Interpreter Performance Assessment	Other
	22	5	5	1	1	3

**MATERIALS AND APPARATUS**

A review was done of the United States employment context that identified the two professions that more frequently employed men (engineering, truck driving) and the two that frequently employed women (elementary teacher, secretary) (Bureau of Labor Statistics, 2018). A male native signer was asked to create a story in ASL about meeting with an elementary teacher and an engineer (see Appendix A for a gloss and literal translation of the elementary teacher story). To reduce any potential influence of the gender of the storyteller on the performance of the participants, a female native signer was also asked to create a story about a truck driver and a secretary. Both were advised to avoid identifying the gender of the character but should instead use POINT or other devices, such as role-shifting into the character.



A follow-up structured interview was designed that included three open-ended questions. These were “1. How did you feel about your interpretation overall?” “2. What aspects of the source texts did you find challenging? Can you give an example and explain why?” and “3. Was there anything in the source texts that you would change? How would you change it and why?” A pause of 20 seconds was inserted between each question in the interview video and the participants were instructed to pause the source video if they needed further time to respond.

A demographic survey was also created and housed in Qualtrics. In a GoReact site, the researchers posted a preparation video labelled Preparation that contained all four ASL stories. The participants could watch this compilation of the four stories once. Then the four ASL stories were posted individually and again, set to be watched only once. The order of the videos was randomly assigned by a coin toss, which resulted in the following order: Story 1: Elementary Teacher, Story 2: Secretary, Story 3: Engineer and finally Story 4: Truck Driver. Finally, a sixth video was included at the end which was the structured interview questions.

## **PROCEDURE**

An electronic call for volunteers was emailed to the members of the Registry of Interpreters for the Deaf who posted their contact information online. After volunteers contacted the researchers, they were sent a copy of the informed consent and a link to the demographic survey. Once that was completed, they were sent a link to the GoReact site and instructed to login and begin with the preparation video. They were told to then watch each of the four stories once and record their interpretation. Finally, they were asked to watch the last video, an interview, and respond to the questions. Once they had completed all aspects of the study, they were sent an electronic gift certificate for \$10.

## **CODING**

The four translations and the interview for each interpreter were first transcribed into written English and checked by two of the researchers independently for accuracy. Then the principal researcher coded the first of the videos provided by the participants and established grounded codes and definitions based on open coding. As a means of providing rater training, the first video was re-coded by a second researcher under the supervision of the principal researcher. Then the remaining 21 samples were coded independently by two researchers, and the inter-coder agreement was high at 96.86% with a range of from 98.40% to 99.86%. The researchers then met to compare and agree upon any differences in coding.

## **FINDINGS**

Table 2 below outlines the 11 pronouns or tactics that the interpreters used in the four different videos. These included “he/him” or “she/her.” A common strategy was to use “they.” Three individuals also said, “a guy” (J, U) or “some men” (M) and that was coded as “Guy.” Some made use of “you” or “we” in their translations. Absent from the translations were the use of “he or she” or the newer non-binary, non-gendered “ze.”

**Table 2.** Pronoun Usage

Story	He	She	Guy	They	You	We	Indefinite	Role	Agent Deletion	Object Deletion	Super-ordinate
1 Elementary											
Teacher	17	53	0	61	9	12	2	7	11	10	2
2 Secretary	0	102	0	35	2	5	6	22	24	13	10
3 Engineer	40	1	1	72	12	5	3	7	1	28	5
4 Truck Driver	8	2	2	97	1	0	7	6	9	23	7
Total	65	158	3	267	22	21	18	45	46	72	24

Seven interpreters replaced a definitive reference such as POINT with an indefinite English pronoun, such as “someone” (G, H, I, M, Q, S, U) and two used “somebody” (E, O). These instances were coded as indefinite pronouns. Some participants labeled the character’s role, such as “the secretary,” which occurred 45 times. Another strategy, used by 16 interpreters, was to use a superordinate term such as “person” (B, E, F, G, I, J, K, M, N, O, P, Q, S, T, U, V), for a total of 24 occurrences.

Two additional strategies were noted that were tied to omitting a reference all together. One was coded as “agent deletion,” where the interpreter omitted the subject/agent. In Example 2 below, the original ASL is presented in a gloss with a possible literal translation. Participant N translated this utterance by omitting a reference to the secretary and by creating a sentence with agentless passive voice.

**Example 2.** Agent Omission

ASL Gloss: POINT (to left) TOLD-ME (left to signer) WAIT LONG WILL

Literal Translation: S/he/they told me it will be a long wait.

Participant N: “I was told that I would have to wait a really long time.”

Some interpreters omitted the object or indirect object in sentences, and this was coded as “Object Deletion.” This can be seen in Example 3 below, where Participant A omitted the direct object “her/him/them.”

**Example 3.** Object Omission

ASL Gloss: (role shift right) ASK (to left) WHERE BATHROOM WHERE?

Literal Translation: I asked (her/him/them) where the bathroom was.

Participant A: “And then I asked where the restroom was.”

A Friedman's non-parametric analysis of variance by ranks for related samples was run to see if there was a difference in the use of pronouns overall. A Bonferroni correction was applied to determine a new significance level of  $p=0.004$  given 11 types of pronouns or tactics used. A significant difference was found ( $*p<0.004$ ). Based on the total number of pronouns used, a post-hoc pairwise comparison was then run using the adjusted level of significance.

The use of "they" was statistically more frequent than eight of the other pronouns, including "he," "guy," "you," "we," the use of an indefinite pronoun, "role," "agent deletion" or the use of a superordinate term. "She" was used more often than 5 other pronouns or terms, including "guy," "you," "we," an indefinite pronoun, or a superordinate term. Object deletion also happened more frequently than 5 other pronouns, including "guy," "you," "we," an indefinite pronoun or the use of a superordinate term. Naming the character's role, the pronoun "he" and agent deletion happened more frequently than the use of "guy."

**Table 3.** Significant Differences in Pronouns

<b>Pronoun 1 – Pronoun 2</b>	<b>p value</b>
They – He	.000
They – Guy	.000
They – You	.000
They – We	.000
They – Indefinite	.000
They – Role	.000
They – Agent Deletion	.002
They – Superordinate	.000
She – Guy	.000
She – You	.001
She – We	.002
She – Indefinite	.001
She – Superordinate	.001
Object Deletion – Guy	.000
Object Deletion – You	.001
Object Deletion - We	.003
Object Deletion – Indefinite	.002
Object Deletion - Superordinate	.001
Role – Guy	.003
He – Guy	.001
Agent Deletion – Guy	.000

#### **GENDERED OR NEUTRAL**

The pronouns were then grouped as either "gendered" or "neutral," where the gendered category included "he," "she," and "guy" while the "neutral" category was a total of the other pronouns or instances of omissions. Table 4 shows a breakdown of where gendered or neutral pronouns were used in each story and the total use.

**Table 4.** Gendered Versus Neutral Pronouns

	Gendered	Neutral
Story1 Elementary Teacher	70	114
Story2 Secretary	102	117
Story3 Engineer	42	134
Story4 Truck Driver	12	150
<b>Total</b>	226	515

A statistical analysis using the Wilcoxon Signed Rank for related pairs to compare each person's total use of a gendered or neutral pronoun resulted in a significant finding ( $N=22$ ,  $*p<0.05$ ). Overall, more neutral pronouns were used. The use of gendered or neutral pronouns in each story was then examined to see where more neutral or gendered pronouns were used, and a Bonferroni correction was computed of  $p<0.012$  given 4 different stories. Non-significant differences were noted in the stories concerning professions that typically employ women, Story 1: Elementary Teacher ( $p=0.20$ ) and Story 2: Secretary ( $p=0.44$ ), meaning neutral or gendered pronouns were used at a similar frequency. A significant difference was found in Story 3: Engineer ( $*p<0.012$ ) and Story 4: Truck Driver ( $*p<0.012$ ), where more neutral pronouns or tactics were used.

#### TYPICAL GENDER VERSUS ATYPICAL

An analysis was done to see which participant assigned a more statistically typical gender to one of the characters based on the use of "he," "she" and "guy/men." The teacher was identified as female at least once by 10 of the participants (D, E, F, H, J, K, M, R, S, U) and as male by 4 (B, G, L, N). The secretary was identified as female by 14 interpreters (B, D, E, F, H, J, L, M, N, O, R, S, T, U) and was never once identified with a male pronoun. The engineer was designated as male by 9 (B, J, L, N, O, R, S, T, U) and by 1 participant as female (K). The truck driver was identified as male by 4 participants (B, M, O, U) and female by 1 interpreter (M) who did so twice. In the remaining instances, a neutral non-gendered tactic or pronoun was used. Table 5 outlines the breakdown in each story as well as the total number of times a typical pronoun was used to designate the referent versus an atypical pronoun.

A Wilcoxon Signed Rank test for related pairs returned a significance difference overall ( $N=22$ ,  $*p < 0.05$ ). To determine where, the use of pronouns "he" and "guy/men" versus "she" was compared in each story. A Bonferroni correction was calculated of  $p<0.012$  given 4 different stories. A significant difference was found in Story 2: Secretary ( $*p<0.012$ ), where "she" was used more often than "he/guy" and Story 3: Engineer ( $*p<0.012$ ), where "he/guy" was used more often than "she." No statistically significant difference was found in the use of "she" or "he/guy" in Story 1: Teacher ( $p=0.06$ ) or Story 4: Truck Driver ( $p=0.19$ ).

**Table 5.** Typical versus Atypical Gender Assignment

	Typical	Atypical	Total
Story1 Elementary Teacher	53	17	70
Story2 Secretary	102	0	102
Story3 Engineer	41	1	42
Story4 Truck Driver	10	2	12
<b>Total</b>	206	20	226

**FLUCTUATING PRONOUNS**

It was noted how some participants fluctuated in their use of pronouns. A comparison of the first four (he/him, she, guy, they/them) found that 8 interpreters alternated between “he/him, “guy” and “she” to “they/them.” This occurred 5 times in Story 3: Engineer, 3 times in story 4: Truck Driver, twice in Story 2: Secretary, and only once in Story 1: Elementary Teacher. An example of this can be seen in Participant O’s translation:

**Example 4.** Fluctuating Pronouns

ASL Gloss: CURIOUS (to right) (eye gaze right) SALARY (on right) WHAT? (eye gaze

Literal Translation: I am curious, what is the salary?

Participant O: “After **they** told me I asked **him** what **their** earning potential was.”

**COMMENTS ABOUT GENDER**

Looking at the qualitative data, when asked to comment about their interpreting and what they would change, 12 of the 22 participants mentioned the need to deal with gender (C, E, F, I, L, M, N, O, P, T, U, V). Some remarked that in ASL the sign used for pronouns is gender neutral (C, I, L, O, P). On the other hand, English pronouns were described as gendered (C, I, P). The participants used terms like “trouble” (N), “concerning” (O), “problematic” (E), “challenging” (L, V), and “difficult” (P, U) to describe translating pronouns when the gender was unknown.

Ten of the 12 talked about trying to avoid the use of stereotypical genders (C, E, F, L, M, N, O, P, T, V). One participant explained it as, “But to me, I made the choice of not identifying the gender of the person because frankly we don’t know a mover can very well be a woman - I know some strong women - even though it’s a more male dominated industry. And you know kindergarten teachers are more often females. But again, I’ve seen some wonderful male kindergarten teachers.” (C). Another interpreter explained, ““I ... ah...did not want to commit to a gender on the first one, the office receptionist. I gave her a ‘she,’ although that was not indicated at all. Just receptionist was indicated. Could have been male. And I ...ah...gave the person the gender ‘she,’ which I now regret doing so.” (F).

Some strategies for dealing with the lack of gender in ASL were mentioned. Some decided to use the third person plural ‘they’ (C, E, I, N, O, U, V). One participant shared, “Um...I know that the use of ‘they’ is not grammatically correct, but I think it's less awkward than... saying ...continuously repeating the noun. Such as continuously repeating ‘and the teacher said this’.” (I). Another said, “I had to keep that gender neutral ‘they,’ which sounds a little funky in English.” (U). One described having to retranslate sections: “I almost said, ‘and then he said.’ Then I had to go back and change it to ‘the... the teacher said,’ to kind of keep those gender-neutral pronouns if I didn't know.” (L). Another shared, “...but for the truck driver I um...purposely said maybe an opposite gender that would have been less stereotypical.” (M).

## DISCUSSION

Based on the findings of this study, this cohort of interpreters made use of 11 different techniques for translating gender-neutral pronouns from ASL into spoken English, several more than what was noted in the earlier research (Quinto-Pozos et al., 2015). The most frequent was the use of “they” similar to other studies (Bradley, Salkind, et al., 2019). This was followed by “she,” and through the deletion of the object or indirect object. Others included the use of “he,” “you,” or “we.” Some deleted the agent (agentless passive voice) or replaced a pronoun with a superordinate term, again tactics noted in the literature (Quinto-Pozos et al., 2015). Identifying the individual by their role and the use of indefinite pronouns were also noted. Finally, three interpreters used the words “guy,” or “men” to identify a referent.

Several of the participants noted concerns about the lack of identified gender for the pronouns in ASL and expressed a desire to avoid stereotyping the characters. Many did through the use of more gender-neutral pronouns or techniques, which were used more often compared to the gendered pronouns (\* $p < 0.05$ ). This included the frequent use of “they.” Similar to what was noted in the literature, it would seem that “they” was used to represent singular non-gendered references (Bradley, Salkind, et al., 2019). The participants also included more neutral pronouns especially in the two stories involving an engineer (\* $p < 0.012$ ) and a truck driver (\* $p < 0.012$ ), suggesting that perhaps for male-dominated professions, this cohort of interpreters was more comfortable assigning neutral pronouns.

At the same time, the characters in the ASL stories were being gendered by some of the interpreters. The secretary in Story 2 was more often assigned the pronoun “she” (\* $p < 0.012$ ) while the engineer was described as “he” (\* $p < 0.012$ ).

The participants in this study did not include “he or she” nor “ze” in their target texts. It could be due to a lack of awareness of “ze” as noted in other studies (Bradley, Salkind, et al., 2019; Lindqvist, 2018) and perhaps due to how “he or she” sounds stilted in spoken English, again as noted in the literature (LaScotte, 2016).

## REPORTED SPEECH

The use of “you” seemed to be tied to doing a literal translation and duplicating the first-person address of the ASL source. In the example below, the interpreter could have translated the ASL sentence as “I asked her/him/them if they were an elementary school teacher,” but instead maintained the direct address and second person pronoun “you” found in the ASL source text.

**Example 5.** Reported Speech

ASL Gloss: HEH (to right) (eye gaze right) YOU ELEMENTARY SCHOOL TEACHER

Participant N: “I said, ‘You really teach in elementary schools?’”

**“WE”**

The use of “we” seemed tied to the verb CHAT in ASL, which didn’t include any referents due to the direction the signer was facing, and his use of role shifting and eye gaze. The interpreters could have chosen to translate this as “She/he/they and I chatted” but instead some decided upon a translation like “We chatted,” or “We got to talking.”

**Example 6.** Use of “We”

ASL Gloss: (role shift left) CHAT (center to right) (eye gaze right)

Participant B: “And we got to talking.”

**UNSUCCESSFUL STRATEGIES**

Some strategies were deemed awkward or unsuccessful by the researchers. These included the overuse of role, for example the repeated use of “secretary” or “receptionist.” Also, much like in other studies, it was noted how some interpreters fluctuated in their use of pronouns, which made it difficult at times to follow the storyline (LaScotte, 2016; Marcoux, 1973). Another tactic was the use of indefinite pronouns, “someone” or “somebody.” For example, in Story 2: Secretary, several interpreters referred to the person as “someone,” which made it seem like a new unidentified person had been introduced into the story.

**Example 7.** Use of “Someone”

ASL Gloss: ASK-ME (left to signer) ME IF I WANT EAT DRINK.

Literal Translation: (S/he/they) asked me if I wanted to eat or drink.

Participant O: “While I was waiting, there was somebody that came up and asked me if I wanted anything to eat or drink.”

**LIMITATIONS**

A few limitations of this study should be noted. The sample only included certified interpreters who were willing to provide samples of their work for assessment. The individuals were allowed to watch the source videos in ASL through completely before attempting an interpretation. Also, the sample size was small with only 22 volunteers. Further research should consider the inclusion of a more diverse pool and perhaps restrict access to the ASL source texts prior to interpreting. Also, the ASL texts were fairly short in duration, less than one minute, and longer texts may elicit different strategies such as more fluctuations or inconsistencies in pronoun use or more frequent use of specific pronouns.

## **CONCLUSIONS**

This study looked at how 22 sign language interpreters interpreted four short source texts from ASL into spoken English where the pronouns in ASL were not identified for gender. Eleven techniques were identified for doing so and the results suggest that the non-gendered pronoun “they” was used frequently, perhaps in an attempt to avoid using stereotypical pronouns. These strategies and the recognition of gender stereotypes by this cohort is significant for the field as this study can be used to help inform interpreter education and professional development.



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## APPENDIX A: ELEMENTARY TEACHER

<b>ASL Gloss</b>	<b>Literal Translation</b>
HAPPEN BEFORE/PAST HIGH SCHOOL SENIOR	I was a high school senior.
VISIT (on right) ELEMENTARY SCHOOL	I visited (an/my) elementary school.
THERE/POINT (right) OLD ELEMENTARY TEACHER POINT	There was (my) old elementary teacher.
MEET (from right to center) (eye gaze right)	I met her/him/them.
(role shift right) CHAT (center to right) (eye gaze right)	We (she, he, they and I) chatted
HEH (to right) (eye gaze right) YOU ELEMENTARY SCHOOL TEACHER	Hey, you are an elementary school teacher.
YOU ENJOY (eye gaze right)	Do you enjoy it?
(role shift right) (eye gaze left) YES WORK F-U-N	Yes. The work is fun.
WORK TRUE GREAT/WONDERFUL (eye gaze left)	The work is really great.
(role shift left) LOOK-AT (to right) (eye gaze right) OIC	Oh, I see.
HEH (to right) (eye gaze right) YOU EXPERIENCE WHAT YOU?	Heh what did you experience?
(role shift right) (gaze left) EXPLAIN (to left)	I will explain.
(role shift left) POINT (on right) OIC (eye gaze right)	Oh, I see.
WHAT (to right)	What?
(role shift right) STORY (to left) (eye gaze left) LONG-LIST	I have a long list of stories.
KID FUN	The kids are fun.
FEEL/TEND DIFFERENT HAPPEN HAPPEN HAPPEN	Many different things happened.
(role shift right) LOOK-AT (to right) (eye gaze right) OIC.	Oh, I see.
(role shift left) SEEM ENJOY, GOOD (eye gaze right)	You seem to enjoy it. That's good.
MAYBE ENVISION SAME-AS (to right) ELEMENTARY TEACHER	Maybe I can see myself doing the same as him/her/them, as an elementary teacher.