

Epicene Pronouns, Specificity, and Motivation in Sentence Processing

Heather Slawny

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Bradley Hoot, Modern Languages: Spanish

Carolina Barrera-Tobón, Modern Languages: Spanish

Abstract

For centuries, there have been attempts to either create or find an epicene singular pronoun in English, to no avail; however, some research indicates that singular *they*, already often used toward nonspecific referents, can extend to specific referents. Increasingly, it is extended to specific referents of either assumed or known binary gender, leaving a possibility for singular *they* to become a normalized epicene pronoun. A self-paced reading activity measured the way that participants process singular *they* based on referent specificity to see if personal motivation affects overall processing of singular *they*, and it found that all of the participants easily processed singular *they* regardless of motivation and specificity, even for name-specific referents. This indicates that participants may have completed the pronominal restructuring necessary to acquire singular *they* as a specific epicene pronoun.

Keywords: singular *they*, gender, pronouns, language processing

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Introduction

In English, and many other languages, singular third-person pronouns have a binary gender system; that is to say, the difference between saying “I see him” and “I see her” is the gender of the referent. Although English does have one gender-neutral pronoun, *it*, this pronoun is only used in reference to inanimate objects and it is offensive to use *it* toward a person. This binary pronoun structure is problematic both because it is difficult to talk about animate referents with unknown gender, and the solutions to this problem that are considered prescriptively acceptable, such as those in (1), are verbose and/or problematic.

- (1) a. The ideal employee knows that **he** should come to work on time.
 b. Whoever did this should be proud of what **he or she** has done.
 c. Every person hopes that **s/he** will be happy.

The binary pronominal structure also raises difficulties for non-binary or otherwise gender non-conforming individuals who do not identify with the gender pronouns *he* or *she*. In this case, the prescriptive solutions do not work at all, insofar as they still refer to the initial structure with binary gender. The necessity for a gender-neutral or “epicene” pronoun is particularly urgent as it pertains to gender identity, because misgendering someone who is transgender, gender non-binary, or otherwise gender variant by referring to them by the wrong pronouns inflicts measurable harm on their mental health (McLemore, 2015).

The issue has recently gained quite a bit of attention; however, it has been a project for hundreds of years. One of the earliest proposals for an epicene pronoun was published in 1792, when philosopher James Anderson proposed a necessity for thirteen different gender pronouns. Since then, there have been over 80 different proposals for epicene pronouns, none of which have been successfully incorporated into common English grammar (Baron, 2016). The failure

of previous attempts is likely in part due to the pronominal system being a closed class category, meaning that it is a class of words that is especially resistant to additions and change. That is to say, since they are function words, their definitions pertain to structural meaning as opposed to semantic meaning; however, because the urgency of the problem persists, many English speakers continue the attempt to normalize and even create new epicene pronouns. The solution to this problem, however, may already be part of English speakers' grammars.

Singular *They*

Singular *they* may be a candidate for a successful epicene pronoun because it is already used in a singular and gender-neutral way in certain contexts. The most popular use of singular *they* is in non-specific contexts when the gender of the referent is unknown (LaScotte, 2016); *they* has been used as a singular and gender-neutral pronoun in nonspecific contexts, such as those in (2), since at least the 1400s (Bjorkman, 2017). This particular use of singular *they* is effectively gender-neutral and has actually been shown to be more acceptable among English speakers in comparison to pronouns that do not correlate with gender expectancy (Doherty & Conklin, 2017).

- (2) a. The ideal employee knows that **they** should come to work on time.
 b. Whoever did this should be proud of what **they've** done.
 c. Every person hopes that **they** will be happy.

In addition to referents with unknown gender, singular *they* is, for some speakers, acceptable in more specific situations when the gender of the referent is known but irrelevant within the context (Bjorkman, 2017). In these instances, such as in (3), the referents are known, specific, and also have either known or assumed binary gender.

- (3) a. My neighbor said **they** would stop by later.

- b. Our professor promised **they** would be in office hours today.
- c. The client left before **they** could finish the purchase.

In recent years, third-person pronouns have begun to receive a great deal of attention as a way to respect and validate the gender expression of others, specifically as they are used toward individuals who don't identify with either *he* or *she*. Although there have been other creations of epicene pronouns for this purpose, such as *ze/hir/hir* and *e/em/eir* (Bjorkman, 2017), singular *they* may be the most easily adopted epicene option insofar as it is already being used in increasingly specific territories; however, using *they* as a gender-neutral pronoun requires that it be acceptable for referents that are specific, known, and whose gender may be relevant within the context. Referents are especially specific and known when they are names, like in (4), and this makes singular *they* as a method of gender expression particularly difficult, because for many English speakers, names can only be referenced using *he/him/his* or *she/her/hers*.

- (4)
- a. Casey said **they** would stop by later.
 - b. Angel promised **they** would be in office hours today.
 - c. Skyler left before **they** could finish the purchase.

There has been both advocacy for the popularization of this specific use of singular *they* as well as resistance against it, but very little research has been done on it. Many non-binary and gender variant individuals are drawn to *they* as a gender pronoun because they feel that it sufficiently expresses their gender identity as not merely masculine or feminine; however, insofar as the duty of using third-person pronouns that align with a person's preferences generally falls on the speaker and not the referent, this requires that everyone who talks about them be capable of using *they* in specific contexts. Advocates for the adoption of specific singular *they* argue that, although mistakes are common at first, using it as a gender pronoun is

not only critically important but also easy after practice, and that eventually every speaker should be able to use these pronouns toward any referent at any time (Gender Pronouns Guide, n.d.). On the other hand, some argue that using singular *they* as a gender pronoun is difficult because it is a necessarily plural pronoun and re-learning it as a singular pronoun is impossible (Nordlinger, 2015), and others who are accepting of the purpose of epicene pronouns and want to use them correctly still have difficulties fluidly using singular *they* (Bukiet, 2015). In other words, most speakers of English seem to have some difficulties using singular *they* for specific referents, regardless of if they are motivated to practice using them or not.

Past research has shown that the gender expectancy of referents is related to the overall acceptability of singular *they*. Foertsch and Gernsbacher (1997) and Doherty and Conklin (2017) both looked at the processing of singular *they* (using a self-paced reading activity and an eye-tracking study, respectively) as it pertained to varying levels of gender expectancy, and found that when singular *they* had a referent with high gender expectancy (such as “mechanic” or “spokeswoman”), participants experienced a processing delay compared to referents with low gender expectancy (such as “cyclist” or “jogger”). Foertsch and Gernsbacher (1997) also examined participants’ reading times based on the level of specificity of the referent; they labeled their sentences either “referential” or “non-referential,” as in (5). Ultimately, they found that participants experienced a further processing delay for “referential” antecedents than for non-referential ones.

- (5) a. Referential: A **party-goer I knew** would never drink after driving, even if **they** only had one drink.
- b. Non-Referential: A **party-goer who drives after drinking** is irresponsible, even if **they** drank only one drink.

This capacity to use singular *they* “referentially”—or, toward specific referents—is described by Bjorkman (2017) as innovative, because all English speakers have at least a conservative distribution of singular *they* that can function with nonspecific referents—this is the use of singular *they* that has been common for centuries—but only some have this innovative distribution such that it can be used toward specific referents.

The project at hand for a functionally epicene pronoun, however, must go one step beyond the specificity researched thus far so that, ultimately, it can be used towards specific referents when they are directly named, like in (4). Bjorkman briefly proposes describes that using singular *they* towards specific and named referents would require a “genuine grammatical restructuring, even for innovative *they* users,” but does not elaborate on what that particular restructuring might look like (Bjorkman, 2017, p. 6). Konnelly and Cowper (2017) assert that there is a three-stage shift that is currently taking place which will result in the complete development of epicene singular *they*, in which the first stage accomplishes the conservative distribution of *they*, the second stage accomplishes the innovative distribution, and completion of the third stage means that the speaker can use *they* to refer to any antecedent at all, regardless of specificity or gender expectancy.

In addition to speakers who believe that singular *they* is entirely impossible to use for specific referents either because it is necessarily plural or because they maintain binary gender conceptions, many English speakers—even those who think that the shift is possible and want to

acquire the use of specific singular *they*—have genuine difficulties using singular *they* toward known and specific people, and this leads to an environment of anxiety surrounding pronoun use in general. Despite the tension around this topic, there has been very little research on the way in which speakers actually “learn” to use singular *they* in this way; that is to say, how English speakers can move from the conservative distribution of *they*, to the innovative distribution, and finally to the specific and gender-neutral distribution that can be used toward referents when they are directly named.

There has been some very recent research from Ackerman (2018) on the morphology of the reflexive form of singular *they* which tested the acceptability of “themselves” as opposed to “themself,” since high acceptability of the word “themselves” would indicate that the distribution of *they* had effectively shifted from only referring to plural “selves” to also being acceptable for a singular “self.” The study saw that, among participants who reported knowing someone who is transgender, those who more frequently interacted with transgender individuals considered “themselves” to be more acceptable than participants with lower amounts of interaction, indicating first that overall experience with gender nonconformity may affect the acceptability of the singular “themselves,” and second that participants with more interaction with transgender individuals have an innovative distribution of singular *they*. This supports the notion that interacting with transgender and gender variant individuals does have an overall effect on shifting toward its innovative distribution; however, what is still unclear is whether it has an effect on restructuring singular *they* such that it can be used more innovatively for specific and known referents.

The research reported here uses a self-paced reading activity to compare the overall motivation that participants had to acquire singular *they* with their real-time processing of

singular *they* as it referred to gender-neutral antecedents of varying levels of specificity, to see if motivation had an effect on participants’ restructuring of *they* to be used for referents that are both singular and specific.

Methods

This experiment used a self-paced reading (SPR) activity which measured participants’ length-adjusted reading times as they read different sentences with singular *they*. These sentences were read in a non-cumulative moving window paradigm on a computer, in which a series of dashes (-) initially stood in the place of the letters in each sentence, and when participants pressed the space bar, a new region consisting of a word or a set of words appeared, like in Figure 1. As participants continued to read the sentence, the previous region was again concealed by dashes, and participants were unable to go back and read previous words in the section. This way, we were able to measure participants’ reading times, in milliseconds, for an isolated word or group of words, based on the time span between space-bar presses.

 My cashier -----
 ----- just -----
 ----- miscouted -----
 ----- the money -----
 ----- and -----
 ----- now -----
 ----- they -----
 ----- have to -----
 ----- recount -----
 ----- the whole register.

Fig. 1
 Illustration of non-cumulative moving window paradigm, using an SPR item from the experiment.

SPR activities are based on the notion that the amount of time it takes a person to read something is a reflection of how long it takes the reader to process what they read (Jegerski,

2014). By measuring participants' reading times for specific words, we were able to compare those reading times to what their expected reading times would have been based on the length of a given word and the speed at which they typically read, producing residual reading times. If a word or set of words had a longer reading time than anticipated, that could indicate that participants had difficulties processing some component of what they had read. Longer residual reading times can sometimes take place during the processing problem itself, and for some readers it can take place just after the problem. This is useful for the project at hand because we can look at reading times for the region that includes singular *they* and the region after singular *they* to see if increasingly specific referents have an effect on residual reading times for those reasons. If they did, this would indicate that there was a processing cost due to the specificity of the referent of singular *they*.

Participants read 90 total sentences; 60 of those sentences were distractors, and 30 were critical stimuli that included singular *they*. The 30 critical sentences were controlled for both gender expectancy and specificity. Nouns were controlled for gender expectancy by using nouns that were found to be gender-neutral from previous norming studies (Doherty & Conklin, 2017; Foertsch & Gernsbacher, 1997). We controlled the gender expectancy of names using Ackerman's (2018) data on the average popularity of male and female names in the U.S. from 1996-2000; however, since the gender expectancy of gender-neutral names can vary drastically based on every participant's personal experiences, participants also rated all of the names used in the study on a scale of 1 (masculine) to 5 (feminine) to ensure that none of the name-specific referents carried high gender expectancy for most of the participants.

Critical sentences were controlled for specificity by implying whether or not the referent was personally known to the speaker based on temporal or physical distance; this marked the

difference between non-specific and specific referents. In sentences with the most specific referents, which were names, we used similar sentences as specific sentences, and either added the name as a referent or replaced the referent with a name entirely, based on how understandable the sentence was without the initial gender-neutral referent.

- (6) a. Non-Specific: I heard that **my friend’s doctor** always takes time to make sure that they explain everything to patients.
- b. Specific: I love that **my doctor** always takes time to make sure that they explain everything to me.
- c. Most Specific – Name: I love that my doctor, **Amari**, always takes time to make sure that they explain everything to me.

To ensure comprehension, all of the sentences—including non-critical ones—were followed by a statement which was either true or false based on what participants had just read. half of these options were true, and half were false. Each participant gave the correct answer to at least 80% of the stimuli, indicating that they comprehended what they had read.

After completing the SPR task, participants gave self-reported responses on their personal opinions about singular *they* as well as how often they actually use and interact with it. These responses were transposed into cumulative scores for overall motivation to learn singular *they* (which we call their “motivation scores”), so that we could aim to quantify the connection between awareness and motivation around singular *they* and its online processing. If participants with higher motivation scores had less of a difference in residual reading times based on the specificity of the referent, that would support the claim that motivation and awareness can affect use of singular *they* by indicating that it has an effect on its processing in real time.

The participants were 32 university students ages 18-28 (mean: 21.2) who were all native English speakers. One participant's data was excluded because they started learning English at age 9 and were not a native English speaker. The total possible range for motivation scores was 0-48, and participants' motivation scores all fell between 21 and 43 (mean: 32.516, standard deviation: 5.659). Two of the participants reported that they identified with *they/them/theirs* pronouns; these participants both had motivation scores of 43, the highest reported. One participant identified with both *she/her/hers* and *they/them/theirs*, and the rest of the participants identified with either *he/him/his* or *she/her/hers*.

Results

Reading times (RTs) were log transformed to check for any outliers in participants' overall reading times and ensure that every participant's data was within 2.5 standard deviations of the others, but no participant was excluded for this reason. All of the RTs were trimmed such that they had a minimum length of 100 ms and a maximum length of 6,000 ms, to account for RTs which were potentially affected by incomplete comprehension of a region or external distractors. The remaining reading times were then length-adjusted so that what was measured was not the reading times alone, but rather the residual reading times, meaning reading times as they deviated from the expectation. Negative numbers in the analysis, then, indicate that the residual reading times were faster than anticipated.

First, we ran a liner mixed model for the region that had singular *they*, whose fixed effects were Specificity (Non-Specific, Specific, Name-Specific), Motivation (a linear scale that ranged from 21-43), and Specificity*Motivation (the interaction between the two). The model that best fit the data controlled for the random intercept of subject, meaning it controlled for the fact that individual participants may have had variation within their own overall reading times.

The model showed that there was no significant correlation based on Specificity ($p=.300$, $F=1.206$), Motivation ($p=.974$, $f=.001$), or Specificity*Motivation ($p=.334$, $F=1.099$). Another linear mixed model was run with the same fixed effects, but for the regions following singular *they* and excluding the final region in the sentence. The best-fitting model controlled for both random intercepts and random slopes for subject and object, meaning it included overall differences in individual RTs in addition to differences among items. The model showed that there was no significant effect on residual reading times based on Specificity ($p=.675$, $f=.395$), Motivation ($p=.905$, $f=.015$), or Specificity*Motivation ($p=.714$, $p=.339$).

These results indicate that, firstly, there was no significant correlation between residual reading times and specificity of the referent. This does not align with previous research, which has shown that using singular *they* towards specific referents requires a specific pronominal distribution that not all speakers have; for this to be represented in the data, there would have been some level of increase in residual reading times as referents became increasingly specific. These results also show that there was no significant effect of the interaction of specificity and motivation, which would have been demonstrated if participants with higher motivation scores had less of a difference in residual reading times by specificity. This is also contrary to some previous research, which indicated that personal motivation may affect overall acceptability of singular *they*.

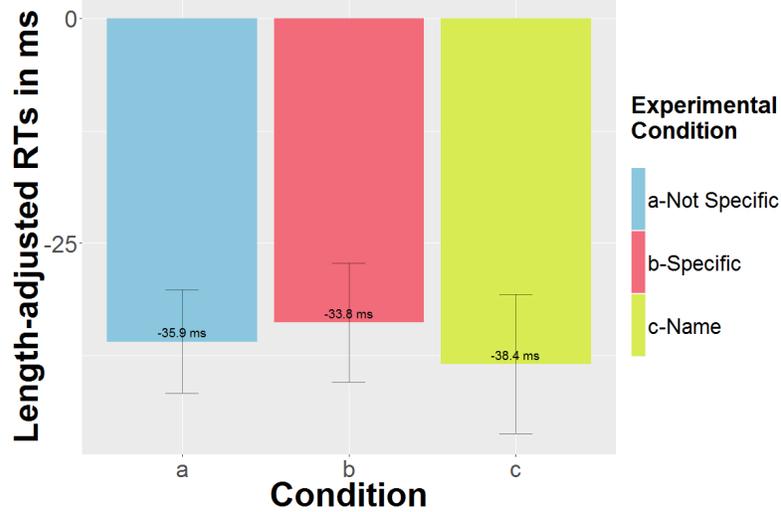
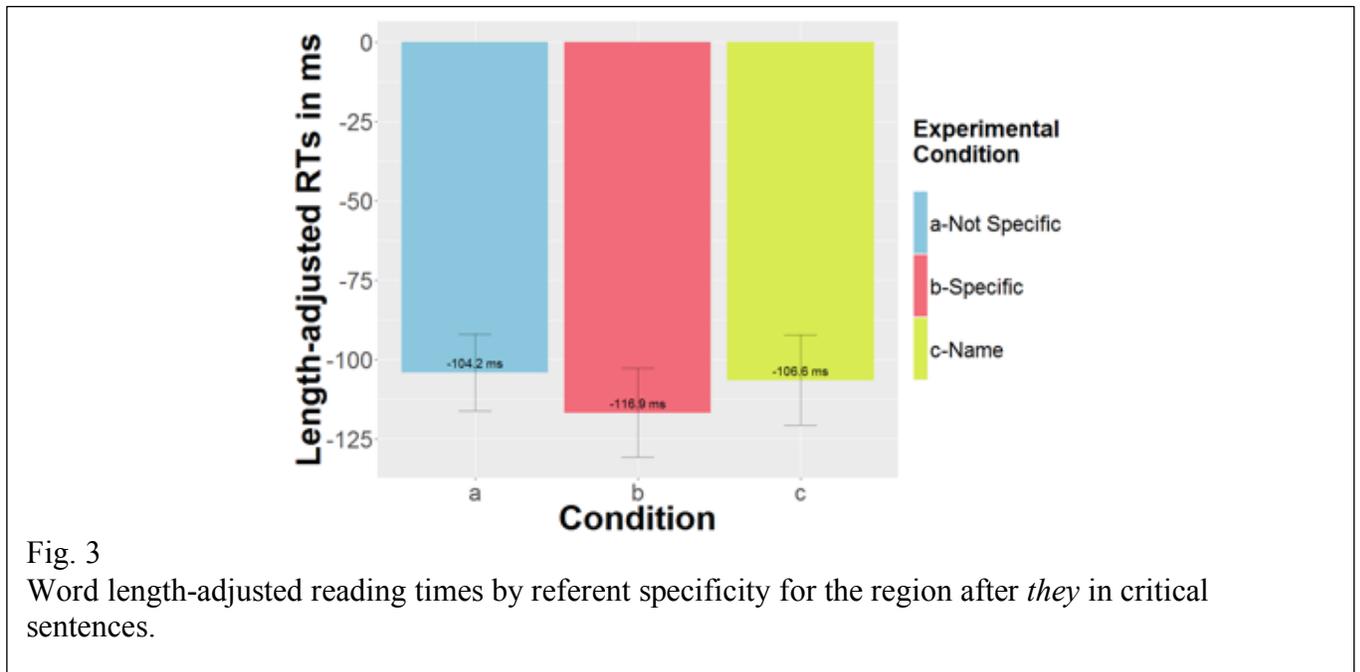


Fig. 2

The word length-adjusted reading times by referent specificity for the *they* region in critical sentences.

Interestingly, although there was no significant effect based on the dependent variables, all of the participants were easily able to process singular *they*. Figure 2 shows participants' residual reading times by specificity in the region that had singular *they*. Since negative reading times mean that participants read and processed a word faster than one would expect, it demonstrates that all of the reading times were slightly faster than expected, indicating that participants had no problems processing it. It is especially notable that name-specific referents were processed with the same level of ease as the other categories of referents, because names are often considered to be the most difficult referents for singular *they*.



The region after *they*, depicted in Figure 3, similarly showed that participants had no problems processing *they* in reference to subjects of any level of specificity, including names, because all of the residual reading times are likewise negative numbers.

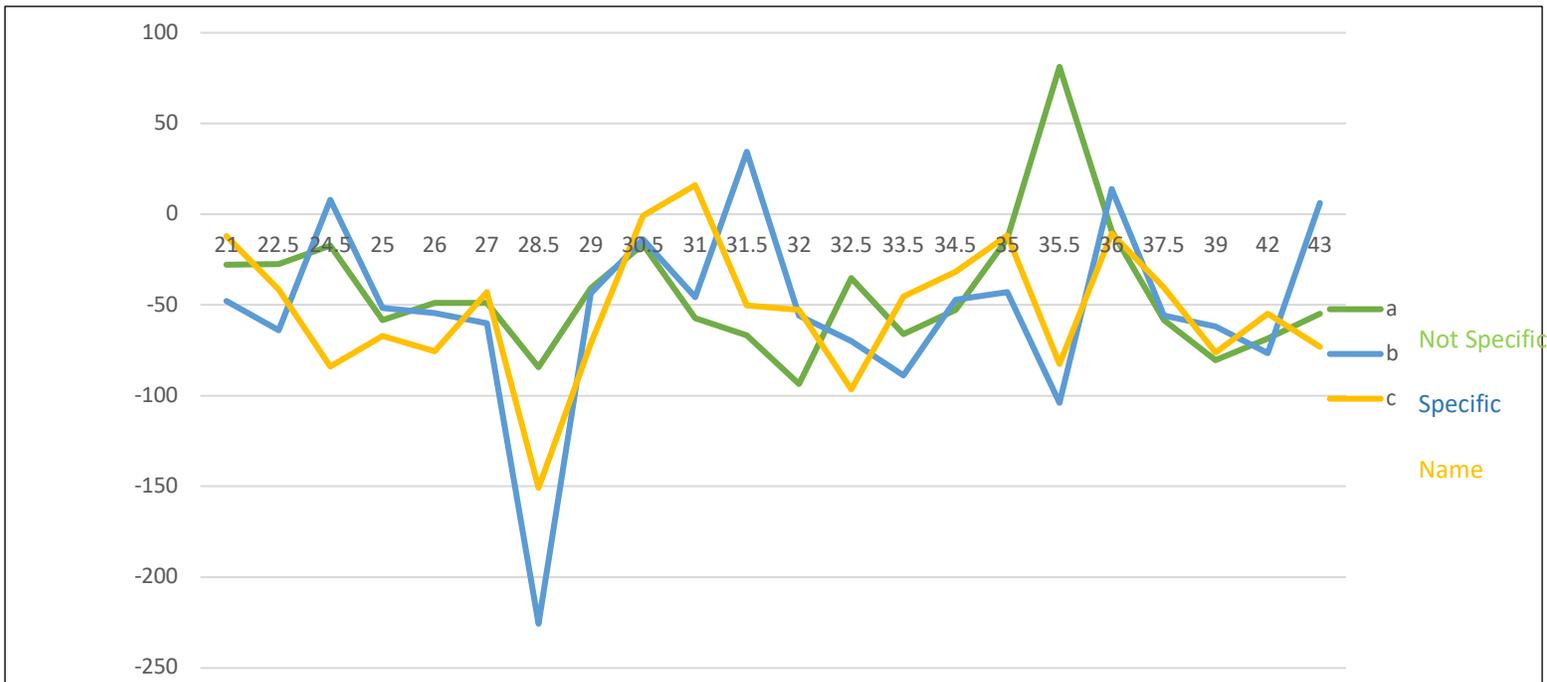


Fig. 4
Word length-adjusted reading times based on specificity for the region after “they” in critical sentences and compared to participants’ motivation scores.

Finally, the interaction between motivation scores and specificity, shown in Figure 4, also does not demonstrate a clear effect, because although we would expect to see a difference based on specificity in addition to a progressively smaller difference based on specificity as we move from lower motivation scores to higher ones, there is no clear pattern at all; the specificity levels are often either similarly processed or processed differently but in random ways, and there is no visible trend based on motivation scores. Although there are a few visible outliers in the reading times, even they are distributed randomly.

Discussion

The SPR results found that there was no significant difference in sentence processing based on referent specificity, motivation scores, or their interaction. Importantly, the participants easily processed singular *they* for referents of all specificities, even name-specific referents, which have been shown to have a processing cost in other research. This may indicate that the participants have already completed the pronominal restructuring in question such that they have moved beyond the innovative use of singular *they* and completed “stage three” as it is posited in Konnelly and Cowper (2017). In addition to being interesting as they pertain to the stages of singular *they* acquisition posited by Konnelly and Cowper, these results are especially significant in light of other processing studies that have been done, because that research indicated that name-specific referents resulted in a processing cost when paired with singular *they*, even in cases of low gender expectancy (Doherty & Conklin, 2017; Foertsch & Gernsbacher, 1997).

Within the framework of the asserted three-stage shift of singular *they*, these results are notable insofar as this particular feature of pronominal restructuring is considered to be something that only a select few English speakers have, but the present research indicates that it may be more common than we previously thought. It is of note, however, that this study

controlled for gender in all of the referents and only included referents that were gender-neutral. Konnelly and Cowper (2017), on the other hand, assert that stage three of the pronominal redistribution of singular *they* allows for the use of singular *they* regardless of gender expectancy.

Furthermore, other studies have almost exclusively measured singular *they* processing alongside referents that have masculine and feminine gender expectancy in addition to neutral ones. Since this study did not include gendered referents, it can only indicate that participants have completed this restructuring as it pertains to the specificity of the referent, but not necessarily as it pertains to overcoming preconceived binary gender in the referent itself. This suggests that a distribution of specific singular *they* may be acquired before a distribution of an entirely gender-neutral singular *they*, but further research on gender expectancy and singular *they* would be beneficial, because insofar as these participants already seem to have specific singular *they* in their pronominal systems for gender-neutral referents, it is important to see if this is merely isolated to gender-neutral situations, or if these participants are likewise able to process singular *they* with referents that have high levels of gender expectancy, like in (7).

- (7) a. Suzie said **they** would stop by later.
 b. The mechanic promised **they** would come to our house today.
 c. Michael left before **they** could finish the purchase.

In addition to gender neutrality, another likely factor for these results is that all of the participants fall within a similar age range (18-28) and have similar levels of education (university). What this may indicate, then, is that this particular community has effectively restructured their pronominal system to make possible singular *they* as an epicene pronoun. Since the participants are relatively young, this restructuring may be a recent development among

English speakers overall, such that some English speakers do not associate *they* with strictly plural referents in the same way that other English speakers do; however, further research on the processing of singular *they* based on specificity as it pertains to the age of participants (and particularly research with a wider age range of participants) would be necessary in order to conclude that younger speakers of English have a different singular *they* than those who learned English during a different time, as opposed to other factors that may be at play.

Another potential cause for these results is motivation: this experiment only studied participants with relatively high motivation scores—that is to say, all of the participants had some prior knowledge of transgender identities and had at least some motivation to be inclusive of them—because of this, it is not possible to strictly say that all English speakers within this temporal context have a different pronominal distribution that allows for specific singular *they*, because this does not yet account for speakers who may have little to no awareness of gender non-binary and transgender identities. It may, however, be a piece of evidence in favor of the fact that having at least some motivation and awareness ultimately contributes to the distribution of specific singular *they*; however, to concretely make this conclusion it would be necessary to likewise measure RTs of participants with significantly lower motivation scores.

Overall, these results indicate that there is indeed a development in the distribution of singular *they* since these participants were able to easily process it with name-specific referents, and this supports the idea that the pronominal restructuring in question is possible and ultimately that singular *they* may eventually become successfully incorporated into our singular pronominal systems as an epicene pronoun.

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Appendix 1: Self-Paced Reading Critical Sentences

1.
 - a. A cashier miscounted the money earlier and then they had to recount the whole register.
 - b. My cashier just miscounted the money and now they have to recount the whole register.
 - c. Jordan just miscounted the money and now they have to recount the whole register.

2.
 - a. A jogger must have left this headband on the bench, so I hope that they don't need it later.
 - b. The jogger must have left this headband on the bench, so I hope that they don't need it later.
 - c. Riley must have left this headband on the bench, so I hope that they don't need it later.

3.
 - a. I heard that my friend's doctor always takes time to make sure that they explain everything to patients.
 - b. I love that my doctor always takes time to make sure that they explain everything to patients.
 - c. I love that my doctor, Amari, takes time to make sure that they explain everything to me.

4.
 - a. I heard that earlier a pedestrian was not being very careful, and they almost got hit by a car.
 - b. That pedestrian crossing the street over there is not being very careful, and they might get hit by a car.
 - c. Peyton is not being very careful crossing the street over there, and they might get hit by a car.

5.
 - a. My friend's neighbor always plays loud music without asking first, and they are often very disruptive.
 - b. My neighbor always plays loud music without asking me, and they are often very disruptive.
 - c. Jessie always plays loud music without asking me, and they are often very disruptive.

6.
 - a. A musician is playing the guitar somewhere nearby, but they don't sound very good.

- b. That musician is playing the guitar right over there, but they don't sound very good.
 - c. Skyler is playing the guitar right over there, but they don't sound very good.
- 7.
- a. A cyclist forgot to lock up that bike earlier, and they will be disappointed if it gets stolen.
 - b. That cyclist just forgot to lock up that bike, and they will be disappointed if it gets stolen.
 - c. Casey just forgot to lock up that bike, and they will be disappointed if it gets stolen.
- 8.
- a. One of the tour guides ran behind schedule earlier, because they had to answer a lot of questions.
 - b. My tour guide ran behind schedule earlier, because they had to answer a lot of questions.
 - c. Angel the tour guide ran behind schedule earlier, because they had to answer a lot of questions.
- 9.
- a. I heard that a child was playing outside earlier, and they fell and got hurt.
 - b. Yesterday my child was playing outside over there, and they fell and got hurt.
 - c. Yesterday Harley was playing outside over there, and they fell and got hurt.
- 10.
- a. A patient in that hallway used to be very sick, but now they are feeling much better.
 - b. The patient in room 12 used to be very sick, but now they are feeling much better.
 - c. Payton in room 12 used to be very sick, but now they are feeling much better.
- 11.
- a. I'm sure that the artist who made these would say that they are proud to be in this exhibit.
 - b. I just heard the artist who made these say that they are proud to be in this exhibit.
 - c. I just heard Jayden who made these say that they are proud to be in this exhibit.
- 12.
- a. I think we're early, but apparently some reporter on the news said they think there will be protests here today.
 - b. I think we're early, but on the news earlier that reporter said they think there will be protests here today.
 - c. I think we're early, but on the news earlier Ashton said they think there will be protests here today.

- 13.
- a. Someone's friend let us use this condo for the party, but they asked us to clean up after ourselves.
 - b. My friend let us use this condo for the party, but they asked us to clean up after ourselves.
 - c. Bailey let us use this condo for the party, but they asked us to clean up after ourselves.
- 14.
- a. I heard that a speaker gave a really convincing speech, and they never needed cue cards.
 - b. That speaker just gave a really convincing speech, and they never needed cue cards.
 - c. Cameron just gave a really convincing speech, and they never needed cue cards.
- 15.
- a. Some editor took a look at my manuscript earlier, and they think it needs a lot of work.
 - b. That editor just took a look at my manuscript, and they think it needs a lot of work.
 - c. Avery just took a look at my manuscript, and they think it needs a lot of work.
- 16.
- a. I heard that yesterday on the news some psychologist said that they think getting enough sleep is really important.
 - b. Yesterday when I was at my appointment my psychologist said that they think getting enough sleep is really important.
 - c. Yesterday when I was at my appointment Angel said that they think getting enough sleep is really important.
- 17.
- a. I heard that an audience member interrupted the show, but they said it was an accident.
 - b. That audience member over there just interrupted the show, but they said it was an accident.
 - c. I heard that Devon interrupted the show, but they said it was an accident.
- 18.
- a. Some teenager is coming over to babysit, and I hope they feel prepared for a challenge.
 - b. A teenager is coming over to babysit, and I hope they feel prepared for a challenge.
 - c. Rowan is coming over to babysit, and I hope they feel prepared for a challenge.

- 19.
- I bet the activist who started the protest didn't know they would have so much support
 - That activist is the one who started the protest and didn't know they would have so much support
 - Grayson is the one who started the protest and didn't know they would have so much support
- 20.
- Some driver apparently got into a car accident earlier, and they had to go to the hospital.
 - A driver that I know got into a car accident earlier, and they had to go to the hospital.
 - I heard that Skyler got into a car accident earlier, and they had to go to the hospital.
- 21.
- Apparently, a chaperone decided to come along on the trip because they wanted to keep everyone safe.
 - That's the chaperone who come along on the trip because they wanted to keep everyone safe.
 - Apparently, Parker decided to come along on the trip because they wanted to keep everyone safe.
- 22.
- I heard that earlier a person was trying to catch the bus, but they didn't make it on time.
 - I saw that earlier a person was trying to catch the bus, but they didn't make it on time.
 - I saw that earlier Addison was trying to catch the bus, but they didn't make it on time.
- 23.
- Some user came in to the store yesterday and said that they don't understand the software.
 - This user came in to the store just now to say that they don't understand the software.
 - Quinn came in to the store just now to say that they don't understand the software.
- 24.
- Some client asked for the manager earlier and said that they were unhappy with the service
 - That client asked for the manager earlier and said that they were unhappy with the service
 - Jensen asked for the manager earlier and said that they were unhappy with the service

- 25.
- a. Someone's cousin called from the airport and said that they can't come to Thanksgiving because of the weather.
 - b. My cousin called from the airport and told me that they can't come to Thanksgiving because of the weather.
 - c. Sage called from the airport and told me that they can't come to Thanksgiving because of the weather.
- 26.
- a. Someone's spouse left a note at the front desk saying that they are coming to visit later today.
 - b. My spouse left a note at the front desk saying that they are coming to visit later today.
 - c. Kerry left a note at the front desk saying that they are coming to visit later today.
- 27.
- a. Someone's partner forgot this book earlier, so we should see where they are so that we can return it.
 - b. My partner forgot this book earlier, so we should see where they are so that we can return it.
 - c. Taylor forgot this book earlier, so we should see where they are so that we can return it.
- 28.
- a. Apparently a representative called and told me that they would answer our questions later today.
 - b. The representative just called and told me that they would answer our questions later today.
 - c. Jamie just called and told me that they would answer our questions later today.
- 29.
- a. I heard that a visitor came unexpectedly, and eventually they overstayed their welcome.
 - b. That visitor over there came unexpectedly, and eventually they overstayed their welcome.
 - c. I heard that Shiloh came unexpectedly, and eventually they overstayed their welcome.
- 30.
- a. Some guest in here won trivia, so we should make sure that they get their prize before they leave.
 - b. That guest over there won trivia, so we should make sure that they get their prize before they leave.
 - c. Teagan over there won trivia, so we should make sure that they get their prize before they leave.

Appendix 2: Motivation Questionnaire and Scoring

What set of pronouns do you want people to use when they talk about you?

she/her/hers

he/him/his

they/them/theirs (+4)

Other (write-in): (+2)

How often do you interact with anyone who is transgender or nonbinary?

(1) Rarely or never	(2)	(3)	(4)	(5) Every day
(+0)	(+1)	(+2)	(+3)	(+4)

How often do you consume media (television, film, music, etc) featuring or created by someone who is transgender or nonbinary?

(1) Rarely or never	(2)	(3)	(4)	(5) Every day
(+0)	(+1)	(+2)	(+3)	(+4)

How often do you say what pronouns you use and/or ask another person which pronouns they use?

(1) Rarely or never	(2)	(3)	(4)	(5) Every day
(+0)	(+1)	(+2)	(+3)	(+4)

I feel personally affiliated with LGBT+ communities.

(1) Strongly disagree	(2)	(3)	(4)	(5) Strongly agree
(+0)	(+1)	(+2)	(+3)	(+4)

I have other affiliations (family members, friends, etc) with LGBT+ communities.

(1) Strongly disagree	(2)	(3)	(4)	(5) Strongly agree
(+0)	(+1)	(+2)	(+3)	(+4)

It is important to me that I respect everyone's personal pronouns of reference.

(1) Strongly disagree	(2)	(3)	(4)	(5) Strongly agree
(+0)	(+1)	(+2)	(+3)	(+4)

Singular they is appropriate to use in academic writing (essays, publications).

(1) Strongly disagree	(2)	(3)	(4)	(5) Strongly agree
(+0)	(+0.5)	(+1)	(+1.5)	(+2)

Singular they is appropriate to use in casual writing (social media, blogs).

(1) Strongly disagree	(2)	(3)	(4)	(5) Strongly agree
(+0)	(+0.5)	(+1)	(+1.5)	(+2)

Singular they is appropriate to use in everyday speech.

(1) Strongly disagree	(2)	(3)	(4)	(5) Strongly agree
(+0)	(+0.5)	(+1)	(+1.5)	(+2)

How often do you think you use singular they in academic writing?

- | | | | | |
|---------------------|--------|------|--------|---------------|
| (1) Rarely or never | (2) | (3) | (4) | (5) Every day |
| (+0) | (+0.5) | (+1) | (+1.5) | (+2) |

How often do you think you use singular they in casual writing?

- | | | | | |
|---------------------|--------|------|--------|---------------|
| (1) Rarely or never | (2) | (3) | (4) | (5) Every day |
| (+0) | (+0.5) | (+1) | (+1.5) | (+2) |

How often do you think you use singular they in everyday speech?

- | | | | | |
|---------------------|--------|------|--------|---------------|
| (1) Rarely or never | (2) | (3) | (4) | (5) Every day |
| (+0) | (+0.5) | (+1) | (+1.5) | (+2) |

Singular they is appropriate to use as a gender pronoun toward a specific person, also known as a personal pronoun of reference.

- | | | | | |
|-----------------------|------|------|------|--------------------|
| (1) Strongly disagree | (2) | (3) | (4) | (5) Strongly agree |
| (+0) | (+1) | (+2) | (+3) | (+4) |

How often do you use singular they as a personal pronoun toward a specific person, including yourself?

- | | | | | |
|---------------------|------|------|------|---------------|
| (1) Rarely or never | (2) | (3) | (4) | (5) Every day |
| (+0) | (+1) | (+2) | (+3) | (+4) |