

**You Called Her a What?!**

**Experimental Evidence for the Expressive and Descriptive Dimensions of Slurs**

Talia Lang, Kristen Syrett

Department of Linguistics, Rutgers University

**Author Note**

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### Abstract

Slurs such as *bitch* are derogatory terms directed at specific groups of individuals. On the one hand, they pattern alongside insults like *moron* or expressives like *damn* by projecting speaker-oriented, not-at-issue content. On the other hand, slurs entail non-derogatory descriptive content in a way that *damn* does not. In this work, we asked whether slurs' expressive content projects past scopal operators to be associated with the speaker and whether slurs resist direct rejection, as other not-at-issue content does. We also investigated whether slurs are ineffable and whether they pattern as a homogenous class separate from insults. Across four online survey experiments conducted with undergraduate students, we tested slurs from four demographic categories, situated in naturalistic exchanges, and compared these with similar items featuring insults, presuppositions, appositives, and at-issue content. In two experiments, target items were embedded under four scopal operators in utterances provided by a speaker in a brief dialogue. Participants decided whether the slurs' derogatory content could be attributed to the speaker. In another two experiments, participants chose how they might object to target items, choosing from rejection options which were direct or indirect, and repetitive or not. A global pandemic, COVID-19, disrupted data analysis. However, we found that slurs and insults behave similarly and differently depending on the linguistic environment and the category of slur or insult. The slur-as-presupposition and slur-as-conventional implicature hypotheses could not be validated. This work may serve as a foundation for further experimental analysis of slurs.

*Keywords:* slurs, expressives, presuppositions, conventional implicatures, descriptives, at-issue, not-at-issue, truth-conditional, projection, scope operators, insults, nonpejorative correlates, embedding, at-issue

## **You Called Her a What?!**

### **Experimental Evidence for the Expressive and Descriptive Dimensions of Slurs**

How would you feel if someone called you a slut, or a nigger, or a faggot? Your reaction would most likely be immediate and visceral. Slurs such as *slut* are derogatory terms that refer to a target group, and as such, elicit moral censure (Croom 2013). There is an interesting, and until recently underexplored linguistic aspect of slurs, which arises when we attempt to capture their meaning. In fact, the proper treatment of slurs is a matter of theoretical debate.

On the one hand, slurs appear to have descriptive, truth-conditional content, which gives rise to patterns linked to entailment (such as contradiction), in contrast to insults. Some researchers have therefore argued that slurs are unlike insults, since insults have only expressive content, while slurs have both expressive and descriptive content (Croom 2013). On the other hand, slurs pattern with expressives such as *damn* or *moron* in that they express speaker perspective (Croom 2013). When slurs are embedded under an operator, the derogatory content still projects and is associated with the speaker's perspective, as it does with expressives. On the basis of such patterns, some have argued that slurs are similar to insults (Potts 2007). These two dimensions of slur meaning pattern differently under negation's scope, separating them from the nonpejorative correlate of a slur, which encompasses a slur's truth-conditional content (Croom 2013).

Given these components of slur meaning and their patterns of scopal behavior, theories have diverged concerning how to capture the meaning of slurs, in particular their expressive content. Some researchers argue that slurs' expressive content is simply not truth-conditional, and that slurs are pejorative because of social taboo (Anderson & Lepore 2013). This theory is insufficient because there is also arguably a social taboo against insults, and this approach also does not account for appropriated slurs, or slurs reclaimed by their target group and used

nonpejoratively (Croom 2013). Other researchers argue that slurs' expressive content *is* truth-conditional (Hom 2008; Hom & May 2018). This theory is also insufficient, because of the paradox created negating both a slur and its nonpejorative correlate (Croom 2013). This theory also does not account for appropriation. Finally, still others argue that slurs' expressive content is not truth-conditional on a par with the descriptive content, but that slurs trigger presuppositions or conventional implicatures of the expressive content (Cepollaro 2015; Whiting 2013; Bianchi 2018).

The constellation of properties reviewed above sets slurs apart from other lexical items and makes them worthy of investigation. Pinning down precisely how to capture the expressive dimensions of their meaning not only allows us to account for the place of slurs in the linguistic taxonomy, but also affords us an opportunity to obtain concrete evidence about how these dimensions of meaning are encoded in language more generally. We address two main questions in the current research, based on the issues reviewed above:

- A. Does slurs' expressive content project past scopal operators to be associated with the speaker? If so, do slurs align with insults in their projective patterns, or diverge? And do slurs pattern homogeneously?
- B. Do slurs resist direct rejection, as other not-at-issue content does? If so, are slurs ineffable, or are speakers willing to repeat the slur in their objection?

Because previous research (both theoretical and experimental) has focused on a narrow set of paradigmatic cases under the assumption that these hand-picked examples reflect slurs as a category, and has primarily focused on particular conversational exchanges, projection past negation, and offensiveness, we turn to experimental methods to systematically probe the linguistic behavior of various slurs in a range of projective environments, comparing them to other

expressives and not-at-issue content as a baseline. Thus, in order to understand slurs, it is first of the utmost importance to understand projection.

### Projection Literature Review

Some researchers, as in Cepollaro & Thommen (2019), use variables to refer to slurs, but we agree with Pullum (2018) that this is a confusing practice, and so will use slurs themselves in this thesis. However, where at all possible, in deference to the discomfort and offense caused by slurs, we will use only the fictional *Mudblood*, instead of real-world examples. *Mudblood* is a slur taken from the Harry Potter universe. (See Table 1 for a list of characters.)

**Table 1**

*Harry Potter Universe*

| Character        | Parentage                 |
|------------------|---------------------------|
| Draco Malfoy     | Pureblood, not Muggleborn |
| Gregory Goyle    | Pureblood, not Muggleborn |
| Hermione Granger | Muggleborn, not Pureblood |
| Lily Evans       | Muggleborn, not Pureblood |
| Ron Weasley      | Pureblood, not Muggleborn |

*Note.* In the Harry Potter universe, *Mudblood* refers to Muggleborns. Muggleborns have nonmagical parents. Purebloods have magical parents.

All slurs' descriptive properties aside, slurs' expressive (derogatory) not-at-issue content projects. Projection is when a word is embedded (underneath) a scope operator – such as negation, modals, questions, conditionals, or factive verbs – and yet its not-at-issue content still 'projects' out from under the operator and is held to be true. (1a) shows projection without a slur, (1b) with a canonical slur, and (1c) with our preferred *Mudblood*, to show that this relation still holds true with an invented slur (as *Mudblood* was invented by J.K. Rowling, the author of the Harry Potter books).

- (1) a. Ron Weasley: Hermione Granger knows that Draco Malfoy hates her.

b. Ron Weasley: Hermione Granger knows that Draco Malfoy calls her a bitch.

c. Ron Weasley: Hermione Granger knows that Draco Malfoy calls her a Mudblood.

In (1a) through (1c), *knows* is a factive verb that presupposes the truth of its complement. The complement of the verb is everything that comes after the verb. In (1a), the complement is “that Draco Malfoy hates [Hermione Granger]”. In (1a), the presence of *knows* means that it is presupposed that Draco does hate Hermione. Ron is claiming that Hermione is aware of this hatred, but is accepting as a *fait accompli* that Draco hates her. (1b) and (1c) are similar. In (1b) and (1c), Ron is claiming that Hermione is aware of Draco calling her names, but is presupposing that this name-calling is truly happening.

Words, slurs included, may be classified according to whether or not they project. Karttunen (1973a/2016) classifies words as holes, filters, or plugs, according to their projective abilities. Holes, such as factive verbs, always allow projective content to scope out. Filters, such as the construction ‘if...then’, occasionally allow projective content to scope out. Plugs, such as verbs of propositional attitude, do not allow projective content to scope out.

(2) Avigail knows that the queen of France is a genius.

(3) Shira said that the queen of France is a genius.

(4) If Shani believes that the queen of France is a genius, then Shani is correct.

In (2), the sentence presupposes that there is a queen of France, because *know* is a factive verb, and thus a hole, allowing the presupposition of there being a queen of France through. In (3), the sentence does not presuppose that there is a queen of France, because *say* is a verb of saying, and thus a plug, preventing the presupposition of the existence of a queen of France through. In (4), the sentence presupposes that Shani believes that the queen of France is a genius, because ‘if...then’ is a filter.

In more recent work, Potts (2015/2007a) has described more nuance in the category of plugs, differentiating between presupposition plugs and other plugs. The same word, such as verbs of saying, can act as a plug for presuppositions but as a hole for other projective content, as in (7) (Karttunen 1973b).

- (5)
- a. The newscaster said that Noa complimented the queen of France.
  - b. The newscaster said that Ayala, the newscaster, complimented the queen of France.

In (5a), it is not necessarily the case that the speaker believes that there is a queen of France – here, *said* is acting as a plug. However, in (5b), it is necessarily the case that the speaker believes that Ayala is a newscaster – here, *said* is acting as a hole. This is attributable to the fact that presuppositions, as in (5a), are blocked by plugs, while appositives, as in (5b), are not blocked by plugs (Potts 2007a).

Tonhauser, Roberts, Beaver & Simons (2013) groups all not-at-issue content (all content that does not address the Question Under Discussion) together as capable of projecting, treating these separate pragmatic phenomena as a natural class on the basis of their Question Under Discussion- and projection-related behavior. The Question Under Discussion is the main topic under discussion in a discourse. It is addressed by at-issue content, and not addressed by not-at-issue content. An easy test for the Question Under Discussion and for at-issue or not-at-issue content can be effective or ineffective negation, as can be seen in (8).

- (6)
- a. Draco Malfoy: That Mudblood over there is wearing a purple dress.
  - b. Hermione Granger: #No, she is not a ‘Mudblood’.
  - c. Hermione Granger: Wait a minute, you cannot say ‘Mudblood’, that is an insult.
  - d. Hermione Granger: No, she is not, that dress is red, not purple.

In (6a), Draco adds two pieces of information to the discourse. The first is that someone is wearing a purple dress, and the second is that that person is a Mudblood (and, by using the word *Mudblood*, Draco is also expressing his attitude of derogation towards this person). If Hermione wants to negate Draco's use of *Mudblood*, she can say (6b), (6c), or (6d). (6b) does not address Draco's use of *Mudblood* felicitously. Instead, 'No, she is not' raises the implication that Hermione actually means (6d). Hermione should instead say (6c), if she wants to address Draco's use of *Mudblood*, even though if she does, she will be putting a stop to their discourse about the purple dress. Hermione can directly negate Draco's comment about the dress and its purple color because at-issue content, that is part of the Question Under Discussion, can be directly negated without stopping the discourse, as in (6d). Draco's use of *Mudblood*, whether or not it is a presupposition or an implicature or something else, is not-at-issue content that cannot be directly rejected, as in (6c) (as averse to (6b), that fails to stop the discourse and address *Mudblood*).

### **Slur Literature Review**

#### **Slurs' Defining Features**

Slurs have three defining features, these being projection, felicity, and appropriation. First, slurs' derogatory content appears able to project out of a wide number of scope operators, though it should be noted that we are unaware of any paper that experimentally tests the ways that slurs' derogatory content projects (Cepollaro & Thommen 2019).

- (7) Ron Weasley: Hermione Granger is not a Mudblood.
- (8) Ron Weasley: Hermione Granger is not a Mudblood, but my next-door neighbor is a Mudblood.
- (9) Gregory Goyle: Draco Malfoy is not a bastard.

In (7), Ron's mere mention of *Mudblood* is enough to offend, even though he is negating its use. He seems to be implying that while Hermione may not be a Mudblood, there are people out in the world who could felicitously and morally be called *Mudbloods*, as seen felicitously in (8). Researchers argue that the same cannot be said about the derogatory content of insults, as in (9) – that Gregory's mere mention of the insult *bastard* is not enough to imply that there are people out in the world who could be called *bastards*. This projective defining feature is why slurs are so difficult to negate, as seen in the comparison between (7) and (8).

Second, slurs have both a felicitous and an infelicitous use. The infelicitous use can be seen in (10) and the felicitous use can be seen in (11) (Croom 2013).

(10) Ron Weasley: Draco Malfoy is a Mudblood.

(11) Draco Malfoy: Hermione Granger is a Mudblood.

In (10), Ron uses *Mudblood* infelicitously, because *Mudblood* refers to *Muggleborns* and Draco is not a *Muggleborn*. In (11), Draco uses *Mudblood* felicitously and pejoratively, because Hermione is a *Muggleborn*.

Third, slurs can be appropriated, or re-claimed by their target groups. Appropriated slurs are no longer derogatory when used by their target group, but remain derogatory when used by people who are not of the target group, as seen in (12).

(12) Hermione Granger: Yes, I am, I'm a proud Mudblood!

In (12), Hermione, a *Muggleborn*, appropriates the slur *Mudblood* so that when she says it, it is no longer derogatory. However, it remains derogatory when Draco, a pureblood, uses it, in (11). This situation can, however, change with time, and slurs can lose their negative connotation even outside of their target group, as with *queer* and *gay*, both of which used to be slurs and now, through a process of appropriation, no longer are in many contexts (Croom 2013). The inclusion

of these words as options on demographic forms is evidence of this change. There are many theories that attempt to explain how appropriated slurs function, though these are not the focus of this thesis (Bianchi 2014, Cepollaro 2017, Beaton & Washington 2015)<sup>1</sup>.

### **Slurs as Expressive Descriptives**

Some researchers argue that slurs are no more than expressives and are thus similar linguistically to expletives and insults (Potts 2007b). Because these researchers do not consider slurs to be unique, they do not study them separately from other insults. Potts (2007b), in his explanations of the properties of expressives, discusses both slurs and non-slur expressives without differentiating between the two. He states that all expressives have “descriptive ineffability,” that is, that it is not possible to define these words without resorting to merely listing examples of how they are used (p. 176). While it may be true for *damn* or *bastard*, it is not true for slurs, such as *Mudblood*. At the very basic level, *Mudblood* means *Muggleborn*. Slurs do not have descriptive ineffability in the same way that insults and expressives do.

Other researchers argue that slurs are different from insults, and should thus be studied as a separate phenomenon. These researchers often argue that slurs are both expressive and descriptive (Croom 2014, Blakemore 2015). It is this descriptiveness that separates slurs from other insults. The difference between expressives and descriptives can be seen in (13) and (14).

(13) Adinah: I broke my damn wand.

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<sup>1</sup> An interesting update to Bianchi (2014)’s echoic appropriation theory would be to combine it with Croom (2013)’s family resemblance category theory. In this case, appropriated slurs would be echoes of derogatory uses of slurs and ironic rearrangements of the salience ranking of those slurs’ family resemblance categories. This would allow for a non-content-based slur theory to explain how slurs are expressive (derogatory) and would still account for Croom (2013)’s non-paradigmatic derogatory uses of slurs.

(14) Lior: I broke my new wand.

Expressives convey an emotional stance of the speaker, while descriptives express something about the properties of the speaker's target. The expressive *damn* in (13) says nothing about the properties of Adinah's wand, but does indicate her emotion as a result of having broken it. The descriptive *new* in (14) says nothing about Lior's frustration at having broken her wand, but does describe her wand's condition. In order to communicate her frustration in (14) without adding new information ('I'm so frustrated'), Lior would have to convey this using different prosody.

Slurs appear to have both expressive and descriptive content, making them different from mere insults (such as *bastard*) and expressives (such as *damn*). This can be seen in (11), where Draco expresses a negative position towards Hermione at the same time as felicitously and truthfully conveying something about her parentage. The argument of those who claim that slurs are both expressive and descriptive is further illustrated in (15) – one cannot felicitously use a slur while also denying that one is asserting something about a property of one's target (Croom 2013). Thus, slurs have descriptive content, that insults are thought to lack. As Potts (2007b) notes, *damn* does not describe anything, as seen in (16).

(15) Draco Malfoy: #Hermione Granger is a Mudblood, but I deny saying anything about her parentage.

(16) Draco Malfoy: I broke my damn broomstick, but I deny saying anything about the broomstick besides that it is broken.

In (16), Draco is able to use *damn* about his broken broomstick without saying anything about the broomstick besides that it is broken. This is because *damn* lacks descriptive content. The same is not true for Draco's utterance in (15). If *Mudblood* is defined as including descriptive

content regarding one's parentage (that both one's parents are not magical) and expressive (derogatory) content indicating the speaker's dislike towards the addressee, as in (17), then by substituting this equation in to Draco's utterance in (15), we can see even more clearly why Draco's utterance in (15) is infelicitous. The expressive (derogatory) content remains, while the descriptive content results in contradiction. This substitution can be seen in (18).

(17) Mudblood = one's parents are both not magical (and I, the speaker, dislike the addressee)

(18) Draco Malfoy: #Hermione Granger's parents are both not magical (and I dislike Hermione), but I deny saying anything about her parentage.

### **Slurs' Nonpejorative Correlates**

The equation in (19), describing *Mudblood's* descriptive content, is a minimal example of a slur's nonpejorative correlate. Here, *Mudblood* minimally refers to Muggleborns, regardless of its derogatory content.

(19) Mudblood = one's parents are both not magical

A nonpejorative correlate describes a slur's target group without being insulting. It is the truth-conditional meaning of the slur (Croom 2015). The form of a nonpejorative correlate reveals where the slur's derogatory (expressive) content is held. If slurs are taken to include two pieces of content, descriptive and expressive, then the descriptive content is always in a slur's nonpejorative correlate, as in (19). Where the expressive (derogatory) content is held determines which slur theory is under discussion – one theory holds that the expressive (derogatory) content is part of the slur's truth-conditional meaning, as in (17), and another holds that the expressive (derogatory) content is not part of the slur's truth-conditional meaning, but is somewhere in its pragmatic environment (the context of its sentence), as in (19). Thus each theory has its own nonpejorative correlate form, either as in (17) or as in (19).

There are also two more arguments about the form of the nonpejorative correlate, the family resemblance category theory and Diaz Legaspe (2018)'s nonpejorative correlate theory.

*Nonpejorative Correlates as Family Resemblance Categories*

Croom (2013, 2015) argues that slurs' nonpejorative correlates are not statement equations, as in (17) and (19), but are instead family resemblance categories, ranked in salience according to the speaker's intended meaning. This means nonpejorative correlates would take the form in (20).

(20) Mudblood: Muggleborn, poor, lazy, stupid, discriminated against

Here, all the attributes listed after the slur in (20) can be ranked for salience by the speaker, according to the meaning that they wish to convey. The slur and the nonpejorative correlate additionally have different extensions from one another, but the slur has a conceptual anchor in the nonpejorative correlate that is the nonpejorative correlate's default setting. In the case of *Mudblood*, its conceptual anchor would be *Muggleborn*. This nonpejorative correlate format can account for non-paradigmatic derogatory usages such as those seen in (21) and (22), originally uttered by comedians using real-world slurs but here adapted to allow for our preferred *Mudblood* (Croom 2015).

(21) Hermione Granger: I hate Mudbloods, but I love Muggleborns.

(22) Lily Evans: Who here is a Mudblood?

Hermione Granger: I am!

Ron Weasley: I'm more of a Mudblood than either of you!

In (21), Hermione, who is a Muggleborn herself, has drawn a distinction between Muggleborns, to whom she has given a positive connotation, and Mudbloods, to whom she has given a negative connotation. She has not appropriated the word *Mudblood* (as she potentially could, since she is a member of its target group) as she still uses it with a negative connotation.

This is possible, some researchers say, because she has ranked the attributes of *Mudblood* from (20) to include *poor*, *lazy*, *stupid*, and perhaps also *discriminated against*, but to not include *Muggleborn*. The slur is still descriptive, but it is now no longer descriptive of Muggleborns.

In (22), the same ranking has occurred. Ron is a pureblood, so him referring to himself as a *Mudblood* would normally be infelicitous, as shown in (10). However, if *Mudblood* refers not to Muggleborns but to people who are poor, then this is a felicitous use, as Ron's family is indeed poor.

Croom (2013) calls these uses non-paradigmatic because they appear to go against the grain of 'traditional' linguistic views of slurs, showcasing how inventive people are in insulting one another. Traditionally, slurs are either derogatory, as in (11), appropriated, as in (12), or infelicitous, as in (10). In the non-paradigmatic uses, in (21), a member of the target group A (*Muggleborns*) using the slur that refers to that target group (*Mudblood*) in a derogatory manner against other members of the same target group A; and in (22), referring to someone who is not a member of the target group A with that same slur, where in both these examples the slur has been used felicitously. These non-paradigmatic uses are not accounted for under the 'traditional' view of slurs, but are accounted for by the family resemblance category theory.

This theory is compatible with both theories where slurs' expressive (derogatory) content is truth-conditional and where it is not. Here, slurs' nonpejorative correlate formula would, for example, not be *Mudblood* = *Muggleborn* but *Mudblood* = *x*, where *x* = *the speaker's salience ranking of Mudblood's family resemblance categories*.

### ***Racial and Gendered Nonpejorative Correlates***

Diaz Legaspe (2018) claims that racial and gendered slurs have different nonpejorative correlates.<sup>2</sup> This claim is based off of the assumption that racial and gendered slurs have different functions – racial slurs address an out-group, while gendered slurs prompt the target to normalize to social standards – and off of the assumption that racial slurs refer to every member of the target group, while gendered slurs refer only to a subset of the target group. Diaz Legaspe (2018)’s support for this is mainly anecdotal, as in “an utterance of ‘All women are sluts’ ... sounds odd, prompting the audience to demand justification or to signal clear cases of women that are not ‘sluts’” (p. 237). This claim, that racial and gendered slurs are not wholly similar – that slurs are not a coherent class – is a testable one.

Many researchers appear to implicitly accept Diaz Legaspe (2018)’s premise by always giving examples from both demographic groups – racial and gendered – of slurs. These examples are also often only a few canonical examples – *nigger* and *bitch* are popular – rather than a more diverse range of slurs.

## **Slur Theories**

### ***Non-Content-Based Slur Theories***

There are two main camps of linguistic slur theory concerning how slurs convey their expressive (derogatory) content – either truth-conditionally in their nonpejorative correlates, or not truth-conditionally. In both cases, slurs are assumed to convey their descriptive content in their nonpejorative correlates, and in the same way as any other word – either a person knows that *apple*

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<sup>2</sup> This difference, if it exists, may be attributable to appropriation. If sexist slurs are more appropriated than racist slurs, then the two may be understood differently by interlocutors but may still have the same linguistic form. The cosmetic sociological (appropriative) difference would conceal the underlying linguistic similarity.

refers to real-world apples, or they do not; either a person knows that *Mudblood* refers to Muggleborns, or they do not.

The first camp, after Spotorno & Bianchi (2015)'s classification, are the non-content-based slur theories, so called because these theories claim that slurs have no inherent derogatory content, in the slurs themselves. The non-content-based theories claim that a slur's nonpejorative correlate is its target group, as in (25), with the derogatory content held outside the realm of linguistics, in societal taboo. The prototypical example of this theory is Anderson & Lepore (2013)'s Prohibitionism. According to Prohibitionism, the reason that (11) is derogatory is because we as a society have mutually agreed that *Mudblood* is derogatory – there is a social taboo, or prohibition, on the word. Because this theory rejects or deflates any linguistic explanation for slurs' negative connotation (derogatory or expressive content), Bianchi (2014) calls this the deflationary theory.

(23)      *Mudblood* = Muggleborn

This theory has two main problems. First, it does not so much solve the problem of how slurs convey their derogatory content as erase it. While there may very well be a social taboo against using slurs, there is also arguably a social taboo against using insults such as *bastard*. Social taboo is an insufficient explanation for slur's expressive (derogatory) content. Second, this theory fails to account for appropriated slurs. If there is a social taboo against the use of slurs, then it should be impossible for slurs to be successfully appropriated, and yet they are, as in (12) (Bianchi 2014).

### ***Narrow or Semantic Content-Based Slur Theories***

The second main camp of linguistic slur theory, again after Spotorno & Bianchi (2015)'s classification, are the content-based slur theories. This second camp can further be split into two main theories. The first of these are the narrow content-based theories, after Spotorno & Bianchi

(2015)'s classification, or the semantic content-based theories, after Cepollaro (2015)'s classification. These narrow content-based theories claim that a slur's nonpejorative correlate contains both its target group and its derogatory content. The nonpejorative correlate in these theories canonically takes the form of (24). These theories claim that a slur's derogatory content is part of its truth-conditional meaning.

(24) Mudblood = Muggleborn and despicable because of it

The prototypical example of this theory is Hom (2008)'s combinatorial externalism, that was later revised in Hom & May (2018)'s Moral & Semantic Innocence theory. Both these theories are closely related to the non-content-based theories because of their emphasis on morality or taboo. The theory of combinatorial externalism claims that slurs' nonpejorative correlates contain both their target group and their derogatory content, as in (24), and that slurs are derogatory because of a social institution of discrimination (an institution of racism for racist slurs, an institution of sexism for sexist slurs, and so on). This theory also claims that slurs have null extensions because, according to Hom (2008), no one is deserving of being derogated because of their target group (their race, their sex, etc). Therefore, there exist no Mudbloods, because it is immoral to insult someone based on their target group.

Similarly to non-content-based theories, combinatorial externalism turns to social institutions or taboo to help explain slurs' derogatory force. And similarly to those theories, this reliance on morality makes this theory insufficient to explain slur's expressive (derogatory) content. While slurs may indeed have null extensions because they are immoral, people have an intuition that slurs do offend, and to explain to Hermione that she has actually not been offended by Draco in (11), because Mudbloods do not actually exist and therefore *Mudblood* has a null

extension, seems callous. Hom attempted to address these concerns in Hom & May (2018)'s Moral & Semantic Innocence theory.

Moral & Semantic Innocence theory has two claims. Its moral claim is that no one is deserving of being derogated because of their target group (as above, in combinatorial externalism). Its semantic claim is that slurs' nonpejorative correlates contain both their target group and their derogatory content, as in (24). Therefore, from these two claims, Hom & May (2018) claim that slurs have null extensions but fictional non-null extensions – in the fictional world where the moral claim is false, slurs have non-null extensions. Hom & May (2018) further create a distinction between derogation, that they call linguistic, and offensiveness, that they call behavioral. This presents only a superficial fix to the concerns with combinatorial externalism. There is still the issue of reliance on social institutions or taboo to explain slurs' derogatory force. Hom & May (2018) has not so much revised combinatorial externalism as repackaged it. It is no less callous to explain to Hermione that in the real world there are no Mudbloods, but there is a fictional world in which they do.

Hom & May (2018) included fictional non-null extensions in their theory in order to address the main argument against the narrow content-based theories, seen in the distinction between (25) and (26).

(25) Hermione Granger is a Mudblood = Hermione Granger is a Muggleborn and despicable because of it

(26) Hermione Granger is not a Mudblood  $\neq$  Hermione Granger is not a Muggleborn and despicable because of it

The narrow content-based theorists claim that (25) embodies slurs' truth-conditional meaning. The lefthand side of the equation carries the same derogatory force as the righthand side,

according to these researchers. According to the researchers who argue against the narrow content-based theories, this equation fails under negation, as in (26). According to Cepollaro & Thommen (2019), the lefthand side of the equation is still derogatory, as in (11), but the righthand side of the equation is no longer derogatory. They take this as evidence that the narrow content-based theories are inadequate, because they do not account for slurs still being derogatory under negation. The narrow content-based theories also do not account for the appropriation of slurs, in the same way that the non-content-based theories fall short on this account. If slurs' derogatory content is part of their truth-conditional meaning, as in (24), then it should be impossible to use slurs without conveying this derogatory meaning – it should be impossible to appropriate slurs – and yet it is possible to do so, as in (12).

#### *Wide or Pragmatic Content-Based Slur Theories*

The second of the content-based theories are the wide content-based theories, after Spotorno & Bianchi (2015)'s classification, or the pragmatic content-based theories, after Cepollaro (2015)'s classification. These wide content-based theories claim that a slur's nonpejorative correlate contains only its target group, as in (23).

These theories claim that a slur's derogatory content is not part of its truth-conditional meaning, but is instead held in some other pragmatic x-factor (Cepollaro 2015). There is no prototypical example of this wide content-based theories because the proponents of these theories disagree on what the pragmatic x-factor is. The possible x-factors include, but are not limited to: contrastive choice signals (Bolinger 2017), conventional implicatures (Whiting 2013), presuppositions (Cepollaro 2015), speech acts (Bianchi 2018, Kirk-Giannini 2019), and use-conditions (Gutzmann 2015). For proponents of these theories, slurs' derogatory content is contained in, for example, an implicature triggered by the use of the slur itself.

The contrastive choice signals, speech acts, and use-conditions theories are insufficient to fully explain slurs' derogatory content. Contrastive choice signal theory claims that the speaker has both the nonpejorative correlate and the slur available in their lexicon, and their choice to use the slur instead of the nonpejorative correlate is informative as to their attitudes and beliefs (Bolinger 2017). Speech act theory claims that slurs are types of speech acts meant to harm their target (Bianchi 2018). Use-conditions theory seeks to describe slurs in terms of the context (speaker and situation, not necessarily linguistic context) in which they are used (Gutzmann 2015). All these theories may well be true for slurs, but may also be true for insults. Thus, they are insufficient, as they do not differentiate between slurs and insults.

### **Past Experimental Research on Slurs**

Previous research on slurs has been mainly theoretical in nature, outlining the various slur theories. Theoretical researchers have focused on whether slurs are any different than insults, and if so, where slurs' expressive (derogatory) content can be found, as this is the crux of the debate over slurs. Slurs' descriptive content is understood to be similar to any other word – *Mudblood* refers to Muggleborns in the same way that *apple* refers to apples. Thus experimental researchers find themselves with an open field in which they can study whether slurs are different than insults and where slurs' expressive content can be found. Because previous research has been mainly theoretical in nature, Spotorno & Bianchi (2015) have called for a more experimental approach. Cepollaro, Sulpizio, & Bianchi (2019) and Bianchi et al (2019) answered that call. These researchers include both slurs and insults in their studies, in order to attempt to differentiate between the two categories of words, and address slurs' properties – such as perceived offensiveness – in order to gain insight into their defining features. The linguistic situations in

which a slur is perceived as more or less offensive can reveal how slurs' expressive content is understood, and thus, where it is held.

Cepollaro, Sulpizio, & Bianchi (2019) conducted three online survey experiments. The researchers reported both the results of each experiment alone and compared results across experiments. In each experiment, participants were presented with a written list of words or utterances and asked to rate their offensiveness on a seven-point Likert scale, and demographic information was collected about the participants. Real-world slurs were used in the experiments. All three experiments compared the perceived offensiveness of insults to nonpejorative correlates to slurs. The first compared these as isolated words. This first experiment found that slurs are perceived as the most offensive. The second experiment compared these in direct speech, similar to (11). This experiment found that slurs in direct speech are perceived as less offensive than in isolation, and that insults in direct speech are perceived as more offensive than in isolation. The third experiment compared these, in direct speech and in indirect speech using *say*, in a form similar to (27). This experiment found that both slurs and insults, in indirect speech, are perceived as less offensive.

(27) Ron Weasley: Draco Malfoy said that Hermione Granger is a Mudblood.

Based on these results, Cepollaro, Sulpizio, & Bianchi (2019) argue in favor of a presuppositional, narrow content-based theory of slurs. They found that in isolation, slurs are more offensive than insults, but that in a phrase, slurs are less offensive than slurs. They explain this by arguing that insults are meant only to offend, while slurs are meant to offend as well as to describe. They note that this explanation is counter to the argument that slurs are the same as expressives, and are not descriptive. The researchers support a presuppositional account of slurs as an explanation of their finding that slurs are less offensive in indirect speech. Under the

presuppositional account, they argue that it is possible for a participant to believe that the person doing the insulting is the speaker, or is the reported speaker. That is, in (27), either Ron is being insulting, because he is the speaker, or Draco is being insulting, because he is the reported speaker. These competing interpretations decrease the slur's perceived offensiveness.

Bianchi et al (2019) conducted two survey experiments in order to assess whether slurs, insults, and nonpejorative correlates differ in their descriptive and expressive content. In each, the researchers tested invented slurs, invented insults, and invented nonpejorative correlates in a written survey. These invented words all referred to real-world demographic groups (i.e., the invented slur *thonkl* would refer to the real-world demographic group of LGBT+ people). In both experiments, participants were presented with the invented words and their definitions. In the first experiment, the invented insults were defined as offending any person in any situation. In the second experiment, the invented insults were defined as offending individuals. In both experiments, participants filled out multiple Likert scales, and gave demographic information. These Likert scales consisted of: a seven-point scale of perceived offensiveness, a six-point scale of social acceptability, a six-point scale of perceived descriptiveness (does this word describe a specific target group with similar characteristics), a seven-point scale of perceived typicality (does this word describe a typical group member), a six-point scale of perceived similarity (whether the target group members are similar to one another), an essentialism scale, and a seven-point scale of the participants' own prejudice towards the real-world demographic groups described in the study. The essentialism scale included a six-point scale of whether a person labeled today would be labeled similarly in the future, a six-point scale of how defining this label is of a person, and a six-point scale of whether a labeled person could change.

In terms of descriptive content, the researchers found that slurs and nonpejorative correlates were more descriptive than insults. They found that slurs indicated more typicality than insults. They found that slurs and nonpejorative correlates indicated similarity, that insults did not. They found that slurs and nonpejorative correlates indicated essentializing, more so than insults. They found that nonpejorative correlates indicated more typicality, similarity, and essentialism than slurs. Similarly to Cepollaro, Sulpizio, & Bianchi (2019), they explained this by arguing that slurs are both expressive and descriptive, while nonpejorative correlates are merely descriptive.

In terms of expressive content, the researchers found that slurs were more offensive and less socially acceptable than insults. They found that participants with low prejudice perceived slurs as less socially acceptable than participants with high prejudice. Participants' prejudice was unrelated to slurs' offensiveness or to insults generally.

There are also two psychological studies that are relevant to this linguistic debate. O'Dea et al (2015) conducted two online survey experiments about the slur *nigger*. In the first experiment, participants read a vignette where a white person referred to a black person as either a *nigger* or a *nigga*, where the two were either strangers or friends. Participants then completed Likert scales of perceived offensiveness and social acceptability, and gave demographic information. The second experiment replicated the first, with the addition of *buddy* and *asshole*. Participants' level of prejudice was also measured. The researchers found, across both experiments, that the non-appropriated *nigger* was more offensive than the appropriated *nigga*, and that the slur was more offensive when the discourse participants were strangers than when they were friends. The researchers also found, from the second experiment, that there is a positive correlation between participants' level of prejudice and the perceived offensiveness of slurs.

O'Dea & Saucier (2017) conducted three online survey experiments assessing slurs' perceived expressiveness and descriptiveness, and whether this is related to slurs' perceived offensiveness. In the first experiment, participants read the same vignette as in O'Dea et al (2015)'s first experiment. Participants then completed Likert scales of perceived offensiveness and social acceptability, whether the slur was descriptive, whether the slur was positively expressive (used to affiliate), and whether the slur was negatively expressive (used to insult). In the second experiment replicated the first, with a different pool of participants. In the third experiment, participants read a vignette about a white person and a black person, either strangers or friends, who arrive at the same restaurant, and the white person calls the black person one of several racial slurs. Participants then completed the same Likert scales as in the first two experiments. Across all three experiments, the researchers found, similarly to O'Dea et al (2015), that the non-appropriated *nigger* was more offensive than the appropriated *nigga*, and that the slur was more offensive when the discourse participants were strangers than when they were friends. The researchers also found that as the perceived offensiveness of the slur increased, its perceived expressiveness and descriptiveness also increased. When given the choice between a slur being more descriptive or more expressive, participants chose more expressive when the slur was also perceived to be more offensive.

### **Current Research**

This thesis probes the question of where slurs sit in the linguistic taxonomy through the lens of slurs' first defining feature, projection. It addresses the question of the projective ability of slurs' expressive (derogatory) content and of its not-at-issueness. Where slurs' expressive (derogatory) content is encoded – either as truth-conditional or not – can be addressed by studying whether this derogatory content is at-issue or not-at-issue, or whether or not it projects. If the derogatory content projects, then it is not-at-issue, and is therefore not entailed truth-conditionally.

This supports the wide content-based theories. If the derogatory content does not project, then it is at-issue, and is therefore entailed truth-conditionally. This supports the narrow content-based theories.

Slurs' other two defining features, felicity and appropriation, are not addressed in this thesis. Projection is the feature that is tied most closely to the slur theories. The slur theories hinge on whether they accurately account for slurs' projective behavior. Felicity, on the other hand, has more to do with word knowledge. When Ron calls Draco a *Mudblood* in (10), this is similar to a new learner of English calling an apple an *orange*. A mistake, but one that says more about the speaker's word knowledge. Appropriation is its own topic, and one that is so broad that it would be too complex to address it in this thesis. The mechanisms that allow for appropriation are different than those that allow for pejorative slurring, and while slur theories must be able to account for both, the tests that would probe whether a certain theory allows for the one and the other are dissimilar. Thus this thesis focuses on projection and not-at-issueness, targeting unappropriated, felicitous slurs' expressive content directly.

Slurs' derogatory content appears able to project out of a wide number of scope operators, as in (28). All the examples in (28) still project *Mudblood*'s derogatory content, as discussed in (7) and (8).

- (28)
- a. Draco Malfoy: Hermione Granger is not a Mudblood.
  - b. Draco Malfoy: Is Hermione Granger a Mudblood?
  - c. Draco Malfoy: If Hermione Granger is a Mudblood, then she is dumb.

With the situating of slurs within the linguistic taxonomy of expressions that encode expressive content, a litmus test can be used to determine new slurs, and a set of experiments can be referred to to prove, at the very least, that slurs are not mere insults. This data can then also be

used to address the debate over where slurs' expressive (derogatory) content is located, whether truth-conditionally or not, as truth-conditional content tends to be at-issue and not to project. Thus this thesis asks whether slurs' expressive (derogatory) content truly projects past several scope operators, and whether it is truly not-at-issue. Real-world slurs are used in order to gather more naturalistic data.

### **Experiment 1**

Experiment 1 investigated slurs' projective ability.

#### **Participants**

The data of 57 university undergraduates, all native speakers of English, was gathered and included. All participants were enrolled in introductory Linguistics or Cognitive Science courses at Rutgers University–New Brunswick. 16 subjects' data was excluded because subjects responded to at least two out of three training items incorrectly, or because subjects took more than 30 minutes to complete the study. Because of the nature of slurs and those specifically targeted in this experiment, in addition to the typical demographic questions about language background, race/ethnicity, and gender/sex, we also asked participants to respond to demographic questions about their religion. All such questions were optional.

#### **Stimuli**

The experimental design employed a 4 x 4 design, manipulating two main factors within participants: slur type (gender/sex(uality), racial/ethnic, religious, invented/potentially new, familiar non-slur insult, invented non-slur insult) and scope operator type (*know* (a factive verb, or 'hole'), *say* (a verb of 'saying' or 'reporting,' or 'plug'), metalinguistic negation, propositional negation). For the contrast between 'holes' and 'plugs', see Karttunen (1973a/2016). (See Table 2 for the complete list of lexical items.) (See the Glossary for a complete list of the slurs and insults,

along with their dictionary definitions.)

**Table 2**

*Target Lexical Items Used in Experiment 1 (Along with Works in Which They are Featured)*

| Lexical type | Lexical category   | Lexical item and paper where discussed |                               |
|--------------|--------------------|--|-------------------------------|
| Slur         | Gender/sex(uality) | <i>bitch</i> (Croom 2013)              |                               |
|              |                    | <i>dyke</i> (Blakemore 2015)           |                               |
|              |                    | <i>faggot</i> (Croom 2013)             |                               |
|              |                    | <i>slut</i> (Croom 2013)               |                               |
|              | Racial/ethnic      | <i>boche</i> (Anderson & Lepore 2013)  |                               |
|              |                    | <i>curry muncher</i> (DiFranco 2015)   |                               |
|              |                    | <i>honky</i> (Potts 2007b)             |                               |
|              |                    | <i>nigger</i> (Croom 2013)             |                               |
|              |                    | <i>kike</i> (Anderson & Lepore 2013)   |                               |
|              | Religious          | <i>papist</i>                          |                               |
|              |                    | <i>proddie</i>                         |                               |
|              |                    | <i>towelhead</i>                       |                               |
|              |                    | Invented/potentially new               | <i>illegal</i> (Kukla 2018)   |
|              |                    |  | <i>kukker</i> (DiFranco 2017) |
|              |                    |  | <i>mudblood</i>               |
| Insult       | Familiar           | <i>thug</i> (Kukla 2018)               |                               |
|              |                    | <i>bastard</i> (Potts 2007b)           |                               |
|              |                    | <i>douchebag</i> (James 1998)          |                               |
|              |                    | <i>fucker</i> (Croom 2013)             |                               |
|              |                    | <i>piece of shit</i> (Blakemore 2015)  |                               |
|              | Invented           | <i>alienist</i>                        |                               |
|              |                    | <i>Bambi killer</i>                    |                               |
|              |                    | <i>dung eater</i>                      |                               |
|              |                    | <i>nerf herder</i>                     |                               |

Each trial had the same structure. They began with a one-sentence definition of the term featured in the trial, followed by a one-sentence description of background about one or more individuals in a discourse context (Person A, Person B, and/or the neighbor), leading directly into a brief dialogue featuring those individuals in which Person A used the target term in the scope of an operator, finishing with a forced-choice question based on this context. The definition ensured that all participants equally understood the meaning (target group) and derogatory force of the term. The definition described the lexical items as “frequently refer[ing]” to a target group in order

to emphasize that the lexical items are always used to refer to a particular population. (Rather than, for example, a lexical item being “frequently used to refer to” a target group, that might imply that the lexical item can be used to refer to multiple populations.) Each trial included one target item in the scope of one target operator. (See Table 3 and Table 4 for sample target trials, and see Appendix A for all experimental trials.)

**Table 3**

*Sample Target Trials from Experiment 1, with Gender/sex(uality) Slur ‘Bitch’*

| Operator                | Trial  |
|-------------------------|--|
| Propositional negation  | Person A is not a woman. Their neighbor <u>is not</u> a woman.<br>Person A: <i>My neighbor is not a bitch. My neighbor is a man.</i>             |
| Metalinguistic negation | Person A is not a woman. Their neighbor <u>is</u> a woman.<br>Person A: <i>My neighbor is not a 'bitch.' My neighbor is a woman.</i>             |
| Factive verb            | Person A and their friend are not women. Person A's neighbor <u>is</u> a woman.<br>Person A: <i>My friend knows that my neighbor is a bitch.</i> |
| Verb of saying          | Person A and their friend are not women. Person A's neighbor <u>is</u> a woman.<br>Person A: <i>My friend said that my neighbor is a bitch.</i>  |

*Note.* All the trials in this table began with “Background: ‘Bitch’ is a derogatory term that frequently refers to women.” and asked “Evaluate this statement: Person A is committed to a belief that certain people are despicable because they are women.” to which the answer options were “Agree” or “Disagree”.

**Table 4**

*Sample Target Trials from Experiment 1, with Familiar Insult ‘Bastard’*

| Operator                | Trial   |
|-------------------------|---|
| Propositional negation  | Person A: <i>My neighbor is not a bastard. My neighbor is a role model.</i> |
| Metalinguistic negation | Person A: <i>My neighbor is not a 'bastard.' My neighbor is a moron.</i>    |
| Factive verb            | Person A: <i>My friend knows that my neighbor is a bastard.</i>             |
| Verb of saying          | Person A: <i>My friend said that my neighbor is a bastard.</i>              |

*Note.* All the trials in this table began with “Background: ‘Bastard’ is a derogatory term that frequently refers to people. Person A is talking to Person B.” and asked “Evaluate this statement:

Person A is committed to a belief that it is socially-acceptable to call people "bastard." to which the answer options were "Agree" or "Disagree".

Stimuli were sorted into four lists using a Latin square design, so that across the lists, each target lexical item (slur) appeared with each of the four linguistic scope operators, but within a list, each target item only appeared once, and all four operators were featured evenly across targets. Each list contained 24 total items, in a pseudorandomized order. Participants were randomly assigned to a list, balancing sample size across lists.

The specific scope-taking operators and slurs were chosen based on those featured in the papers reviewed in the Slur Literature Review section. Propositional negation and factive verbs were targeted, since they allow for projective content to scope out (see Karttunen 1973a/2016, Tonhauser, Roberts, Beaver & Simons 2013). The contrast between metalinguistic and propositional negation follows from discussion in Cepollaro & Thommen (2019). Verbs of saying were targeted, since they (usually) do not allow for projective content to scope out (see Karttunen 1973a/2016). Verbs of saying included the overt complementizer *that* as a control, to indicate indirect, reported speech rather than direct speech (D'Arcy 2015).

All slurs were the same part of speech (nouns), chosen not only for consistency, but also because the literature has primarily focused on slurs that are nouns. The four types of slurs were chosen as categories also based on the background literature, and comparisons between them (see Diaz Legaspe 2018, Croom 2013). Invented/potentially new slurs were included not only because such slurs have been mentioned in previous literature, but also to test whether the environments created in this experiment could be used as a diagnostic for slurs. Of the invented slurs, *Bambi killer* was intended to refer to deer-hunters (a reference to *Bambi* (1942)); *dung eater* was intended to refer to dung beetles, and could refer either to *The Ant Bully* (2006) or *A Bug's Life* (1998);

*alienist* was intended to refer to people who believe in aliens. Insults were included to test whether slurs and insults are treated as separate linguistic phenomena (see Potts 2007b).

We did not test appropriated slurs or slurs used infelicitously (outside of propositional negation), both of which have different linguistic behavior patterns than felicitous, un-appropriated slurs (see Croom 2013). All slurs were used felicitously, outside of propositional negation, according to the in-group of their target. This is because propositional negation (with slurs) only takes place when the speaker assumes that the slur is being used infelicitously (see Cepollaro & Thommen 2019). The demographic information collected about participants allowed for us to control for participants' identities affecting their responses and leading to readings of appropriation. All slurs were written as single terms using the dialect of 'standard' American English to avoid the appearance of being appropriated. For example, in African American Vernacular English (AAVE) *nigger* might be pronounced and/or written as *nigga* (see Pittman 2007). Euphemisms such as *n-word* were also avoided for this reason. Items were constructed so as to avoid the use of first names in order to prevent participants from making assumptions about the demographic background of the speaker (e.g., gender, ethnicity, etc.) based on cultural or sociolinguistic knowledge, as these assumptions might indicate appropriated use (see Sidhu & Pexman 2015). Instead, neutral titles such as "Person A", "Person B", "friend", and "neighbor" were used.

Finally, we presented the items in print on the computer screen instead of presenting auditory stimuli either in place of or alongside of the written stimuli. In this way, we avoided possible overt prosodic cues that might signal an item's status as a slur or insult, but more importantly, also to avoid the demographic background information that would be featured in the voice of the recorded speaker (e.g., white woman). Because the difference between propositional

and metalinguistic negation is subtle in print, and because we cannot control for the implicit prosody that participants assign to the stimuli as they read, we placed the slurs appearing in the metalinguistic negation items in scare quotes (e.g., ‘bitch’), since this orthographic convention signals this pattern of language usage (see Syrett, Simon, & Nisula 2014, Predelli 2003).

### **Procedure**

Items were presented on Qualtrics software via an online link in the Sona experiment system. Test items were pseudorandomized. A training session preceded the experimental session, during which participants were familiarized with the experimental task. (See Appendix B for all training trials.) They were presented with trials that modeled the structure of the test trials, but that did not contain slurs.

After the experimental session proper, participants were asked to complete three additional brief sections. (See Appendix C for all three sections.) First, for each target slur, they were asked whether it could be used to describe each of the contrasting populations (e.g., *bitch*: female/woman or male/man, *nigger*: African American or non-African American). Second, for each target slur or familiar insult item, they were asked to answer, on a scale of 1-5, how shocking it would be to encounter the word out of the blue from someone who is not part of the target group, and thus not appropriating the word. The second section was positioned after the first so that participants’ responses in one section would not affect the other, as both sections deal with felicitous target groups. Finally, they were asked to provide the additional demographic information described above. The first two sets of questions provided us with participants’ assessment of the target population(s) for each item, and a baseline of the social taboo of the item, respectively.

### **Predictions**

Based on the previous theoretical research on slurs and research on projective content, we

generated the following hypotheses. First, we predicted that if the target items' 'not-at-issue' meaning (their derogatory connotation) projected beyond the scope operator, then participants would infer that the speaker in the scenario was committed to the belief entailed by that term, answering affirmatively, thereby making this test informative about speaker perspective. If the participant selected 'disagree', this would indicate that the derogatory nature of the slur or insult had *not* projected out of the scope operator.

We then generated specific predictions based on the type of operator. When the target item was placed under propositional negation, we predicted that participants would infer that the speaker *was* committed to that belief. When the target item was placed under metalinguistic negation, we hypothesized that participants would infer that the speaker was *not* committed to that belief. When the target item was placed under the factive verb *know*, we predicted that participants would infer that the speaker *was* committed to that belief. When the target item was placed under a verb of saying, we hypothesized that participants could answer one of two ways, depending on the type of projected content encoded in the slur. If the content is encoded as a presupposition, projection should be blocked by *say*, that would then act as a 'plug,' and the speaker would be assessed as *not* being committed to that belief (Potts 2015). If, however, it is encoded as a conventional implicature, projection should not be blocked by *say*, that would then act as a 'hole,' and the speaker would be assessed *as* being committed to that belief (Potts 2007a). Finally, we were interested in determining whether all slurs pattern as a coherent natural class or not.

## Results

A global pandemic, COVID-19, disrupted data analysis. Several statistical analyses were run on the data from Experiment 1. A Generalized Linear Mixed Model, with Bernoulli factor, in R, analyzed operator type (factive verb, metalinguistic negation, propositional negation, and verb

of saying) and lexical item (slur and insult). In Table 5, the column titled “Estimate” includes the beta coefficients. These indicate that there was a significantly high degree of agreeing – of projecting – when it came to the factive verb operator (in Table 5, the “Intercept”). There were significantly low degrees of agreeing – of projecting – for the other three operators. There was a significantly high degree of agreeing for slurs. Participants were more likely to agree with a slur than with an insult. Slurs patterned differently than insults. The significant differences were greater for the operators than for slurs. The significant difference for metalinguistic negation was greatest in value (regardless of valence – positive or negative) of all the operators. The remainder of the operators had similar significant differences, disregarding valence.

**Table 5**

*Experiment 1, Fixed Effects Generalized Linear Mixed Model – Operator Type and Lexical Item*

|                       | Estimate | Std. Error | z value | Pr(> z ) |     |
|-----------------------|----------|------------|---------|----------|-----|
| (Intercept)           | 1.6054   | 0.1971     | 8.145   | 3.78e-16 | *** |
| operatormeta_negation | -3.7468  | 0.2238     | -16.739 | < 2e-16  | *** |
| operatorprop_negation | -1.5744  | 0.1927     | -8.171  | 3.05e-16 | *** |
| operatorsay_verb      | -1.4815  | 0.1929     | -7.680  | 1.59e-14 | *** |
| item_typeslur         | 0.3129   | 0.1385     | 2.258   | 0.0239   | *   |

*Note.* \*\*\* indicates significance at  $p < 0.001$ . \* indicates significance at  $p < 0.05$ .

This same data was analyzed for percentages of agreement with the question asked. In Table 6, slurs and insults had a comparable pattern of projection for the scopal operators verb of saying, metalinguistic negation, and factive verb. For the scopal operator propositional negation, slurs were more likely than insults to project and be associated with the speaker.

**Table 6***Experiment 1, Percentages of Agreement with Question Asked*

| Operator                | Slur  | Insult |
|-------------------------|-------|--------|
| Propositional negation  | 62.7% | 41.2%  |
| Factive verb            | 85.5% | 80.7%  |
| Metalinguistic negation | 12.3% | 19.3%  |
| Verb of saying          | 58.3% | 56.1%  |

This data was further investigated in terms of the specific slur demographic or insult category. In Table 7, it becomes clear that the religious slurs were an outlier in the category of propositional negation, as these slurs were less speaker-oriented than the other three slur demographics when under that operator.

**Table 7***Experiment 1, Percentages of Agreement with Question Asked, by Demographic Category*

| Operator                   | Slur                   |                   |           |                                 | Insult |          |
|----------------------------|------------------------|-------------------|-----------|---------------------------------|--------|----------|
|                            | Gender/<br>sex(uality) | Racial/<br>ethnic | Religious | Potentially<br>new/<br>invented | Known  | Invented |
| Propositional<br>negation  | 70.2%                  | 64.9%             | 45.6%     | 70.2%                           | 35.1%  | 47.4%    |
| Factive verb               | 82.5%                  | 78.9%             | 87.7%     | 93.0%                           | 86.0%  | 75.4%    |
| Metalinguistic<br>negation | 8.8%                   | 12.3%             | 8.8%      | 19.3%                           | 24.6%  | 14.0%    |
| Verb of saying             | 54.4%                  | 66.7%             | 56.1%     | 56.1%                           | 64.9%  | 47.4%    |

A second statistical analysis was run on the data from the optional target-group questions from Experiment 1. (See #2 in Appendix C for these questions.) This analysis was a chi-square, and analyzed lexical item (racial/ethnic slur, gender/sex(uality) slur, and religious slur). This chi-square was 115.85 (df = 4) with a p-value < 2.2e-16, and was highly significant. As in Table 8, participants were most likely to disagree with a racial/ethnic slur, most likely to agree with a gender/sex(uality) slur, and most likely to disagree with a religious slur.

**Table 8***Experiment 1, Chi-Square Contingency Table – Target-Group Optional Question*

|                 | Racial/ethnic slur | Gender/sex(uality) slur | Religious slur |
|-----------------|--------------------|-------------------------|----------------|
| Disagree (“no”) | 119                | 76                      | 134            |
| Agree (“yes”)   | 36                 | 116                     | 25             |
| No opinion      | 68                 | 30                      | 62             |

This same data was analyzed in terms of percentages. Table 9 validates the analysis in Table 8. Participants were most likely to disagree with a racial/ethnic slur, most likely to agree with a gender/sex(uality) slur, and most likely to disagree with a religious slur.

**Table 9***Experiment 1, Target-Group Optional Question, Percentages*

|                 | Racial/ethnic slur | Gender/sex(uality) slur | Religious slur |
|-----------------|--------------------|-------------------------|----------------|
| Disagree (“no”) | 52.3%              | 16.1%                   | 11.3%          |
| Agree (“yes”)   | 34.2%              | 53.4%                   | 60.6%          |
| No opinion      | 13.5%              | 30.5%                   | 28.1%          |

This data was further investigated in terms of the specific slur words. In Table 10, it becomes clear that the slur words driving the pattern were *bitch* and *slut* (and in particular, *bitch*), which were far more likely to be agreed with than the other gender/sex(uality) slurs.

**Table 10***Experiment 1, Target-Group Optional Question, Percentages of Agree for Slur Words*

| Gender/sex(uality) slur |       | Racial/ethnic slur |       | Religious slur   |       |
|-------------------------|-------|--------------------|-------|------------------|-------|
| <i>bitch</i>            | 75.4% | <i>boche</i>       | 7.0%  | <i>kike</i>      | 7.0%  |
|                         |       | <i>curry</i>       |       |                  |       |
| <i>dyke</i>             | 29.8% | <i>muncher</i>     | 17.5% | <i>papist</i>    | 10.5% |
| <i>faggot</i>           | 43.9% | <i>honky</i>       | 22.8% | <i>proddie</i>   | 7.0%  |
| <i>slut</i>             | 54.4% | <i>nigger</i>      | 15.8% | <i>towelhead</i> | 19.3% |

A third statistical analysis was run on the data from the optional outgroup-inappropriateness questions from Experiment 1. (See #3 in Appendix C for these questions.) This analysis was a linear mixed-effects model, and analyzed lexical item (slur and insult). (See Table

11 for this analysis.) This analysis found a highly significant effect of lexical item. Slurs were considered to be more inappropriate than insults.

**Table 11**

*Experiment 1, Fixed Effects Linear Mixed-Effects Model – Lexical Item*

|               | Value     | Std.Error  | DF  | t-value   | p-value |
|---------------|-----------|------------|-----|-----------|---------|
| (Intercept)   | 3.004386  | 0.09676703 | 851 | 31.04762  | 0       |
| item_typeslur | -1.181126 | 0.06977723 | 851 | -16.92711 | 0       |

*Note.* The output of R for the p-value in this table was zero, however, the p-value was likely simply too small for the program to compute, not truly zero.

This same data was analyzed in terms of percentages of answers chosen. Table 12 validates the analysis in Table 11. Slurs were considered to be more inappropriate than insults. Most of the responses for slurs were “Extremely inappropriate” or “Very inappropriate”, whereas most of the responses for insults were “Moderately inappropriate” or “Slightly inappropriate”.

**Table 12**

*Experiment 1, Percentages of Answers Chosen – Optional Outgroup-Inappropriateness Question*

| Likert scale             | Slur               |               |           | Insult |
|--------------------------|--------------------|---------------|-----------|--------|
|                          | Gender/sex(uality) | Racial/ethnic | Religious | Known  |
| Extremely Inappropriate  | 54.6%              | 49.6%         | 50.0%     | 14.9%  |
| Very Inappropriate       | 25.1%              | 25.4%         | 23.0%     | 17.5%  |
| Moderately Inappropriate | 16.3%              | 16.7%         | 17.7%     | 29.8%  |
| Slightly Inappropriate   | 3.1%               | 4.8%          | 7.1%      | 27.6%  |
| Not Inappropriate at all | 0.9%               | 3.5%          | 2.2%      | 10.1%  |

This data was further investigated, looking at only the “Extremely inappropriate” and “Very inappropriate” responses. Table 13 shows variation within slurs and insults. There are obvious differences in percentages of responses between *bitch* and the remainder of the

gender/sex(uality) slurs, between *honky* and the remainder of the racial/ethnic slurs, and between *papist* and *proddie* and the rest of the religious slurs.

**Table 13**

*Experiment 1, Percentages of “Extremely Inappropriate” and “Very Inappropriate” Chosen – Optional Outgroup-Inappropriateness Question*

| Gender/sex(uality) | Slur          |                      |                        | Insult Known         |       |
|--------------------|---------------|----------------------|------------------------|----------------------|-------|
|                    | Racial/ethnic | Religious            |                        |                      |       |
| <i>bitch</i>       | 57.9%         | <i>boche</i> 70.2%   | <i>kike</i> 82.5%      | <i>bastard</i>       | 28.1% |
|                    |               | <i>curry</i>         |                        |                      |       |
| <i>dyke</i>        | 84.2%         | <i>muncher</i> 87.7% | <i>papist</i> 54.4%    | <i>douchebag</i>     | 24.6% |
| <i>faggot</i>      | 91.2%         | <i>honky</i> 43.9%   | <i>proddie</i> 54.4%   | <i>fucker</i>        | 40.4% |
| <i>slut</i>        | 84.2%         | <i>nigger</i> 98.2%  | <i>towelhead</i> 98.2% | <i>piece of shit</i> | 36.8% |

## Discussion

The results of the statistical analyses of this experiment demonstrated several things.

- A. Slurs and insults projected similarly for factive verb, verb of saying, and metalinguistic negation, counter to the predictions;
- B. Slurs projected more than insults for propositional negation, despite religious slurs, which projected more than the other demographic categories of slurs;
- C. Gender/sex(uality) slurs could apply to people outside of the target group, unlike racial/ethnic and religious slurs, because of *bitch*, which was highly likely to apply to people outside of the target group (it was predicted that all slurs could not apply to people outside of the target group);
- D. Slurs were more inappropriate than insults despite *bitch*, *honky*, *papist* and *proddie* (which were more appropriate) (it was predicted that all slurs would be more inappropriate than insults);
- E. The factive verb scopal operator allowed for projection, as predicted;

- F. The metalinguistic negation scopal operator did not allow for a high degree of projection, as predicted;
- G. The propositional negation scopal operator did not allow for a high degree of projection, counter to the predictions; and
- H. The verb of saying scopal operator allowed and did not allow for projection fairly equally (the numbers were nearly at chance), which did not allow the slur-as-presupposition or slur-as-conventional-implicature hypotheses to be validated.

It is possible that slurs and insults projected similarly, for the most part, because both have expressive, derogatory, speaker-oriented content. In this case, slurs' descriptive content may not affect how speaker-oriented the slur is understood to be.

It is notable that the propositional negation scopal operator did not allow for projection, unlike what was predicted. It is possible that the participants misunderstood the propositional negation as being metalinguistic negation, as negation is very reliant on nuances such as prosody and focus. It is notable that while propositional negation did not behave as predicted, it behaved differently than metalinguistic negation. Participants may have realized that propositional and metalinguistic negation are different, but may not have realized in what way they are different. Religious slurs under propositional negation may have been an outlier because participants were less familiar with these slurs, before the study began, compared to other demographic categories of slurs. This would have affected their responses to questions about these more unfamiliar slurs.

It is notable that the racial/ethnic slurs and religious slurs patterned differently from gender/sex(uality) slurs. The phenomenon of people using gender/sex(uality) slurs to describe people outside of those slurs' target groups has been addressed by feminist theory, which claims that, for example, when a man is insulted by being called a *bitch*, he is not insulted because of the

use of the slur per se, but is instead insulted because to be called a *bitch* is to be called a woman, which is therefore the worse insult. If gender/sex(uality) slurs, specifically *bitch*, are more socially acceptable – as shown by this experiment – than racial/ethnic or religious slurs, then gender/sex(uality) slurs may be taken to refer to more people, even outside their target group. This may mean that *bitch* is closer to being fully appropriated – by people outside as well as within the target group – than racial/ethnic and religious slurs. This is a possible subject for further research<sup>3</sup>.

It is notable that *honky*, *papist*, and *proddie* were outliers in being more socially acceptable than other slurs in those demographic categories. It is possible that people were less familiar with these slurs prior to taking part in the study. This would have affected their responses to questions about these more unfamiliar slurs.

## Experiment 2

Experiment 2, that did not include slurs, served as a control to Experiment 1's investigation of slurs' projective ability.

### Participants

The participants of Experiment 2 were identical to those in Experiment 1. The data of 67 university undergraduates was gathered and included. 18 subjects' data was excluded because subjects responded to at least two out of three training items incorrectly, or because subjects took more than 30 minutes to complete the study.

### Stimuli

The experimental design employed a 4 x 4 design, manipulating two main factors within

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<sup>3</sup> An interesting approach to further research might be to compare slurs not by demographic category but by degree of appropriation. An experiment might first ask for the level of offensiveness and target-group of multiple slurs, to operationalize their level of appropriation, and then situate these slurs in different linguistic environments, as in this work, and compare slurs which are highly appropriated with those which are lowly appropriated. This would add another dimension into the classification of slurs, taking into account the real-time changes in meaning and use of these words, and, crucially, include appropriation in a discussion of offensively-used slurs, as this is a crucial dimension of slur understanding.

participants: presupposition trigger (possessive, *again*, *stop*, *manage*) or conventional implicature trigger (nominal appositive, full appositive relative clause) and scope operator type (*know* (a factive verb, or ‘hole’), *say* (a verb of ‘saying’ or ‘reporting,’ or ‘plug’), metalinguistic negation, propositional negation). (See Table 14 for the complete list of lexical items.)

**Table 14**

*Target Lexical Items Used in Experiment 2 (Along with Works in Which They are Featured)*

| Control type                    | Lexical item and paper where discussed  |
|---------------------------------|---|
| Presupposition                  | <i>my</i> (possessive)<br><i>again</i><br><i>stop</i><br><i>manage</i>  |
| Nominal appositive              | ‘ <i>my hairdresser</i> , an appositive, x’ (Syrett & Koev 2015)  |
| Full appositive relative clause | ‘ <i>my hairdresser</i> , <i>who</i> appositive, x’ (front of statement)<br>(Syrett & Koev 2015)<br>‘ <i>my hairdresser has a x</i> , <i>who</i> appositive’ (end of statement)<br>(Syrett & Koev 2015) |

The trials of Experiment 2 were identical to those in Experiment 1. (See Table 15 for a sample target trial, and see Appendix D for all experimental trials.) The lists of Experiment 2 were identical to those in Experiment 1. Each list contained 16 total items.

**Table 15**

*Sample Target Trial from Experiment 2, with Possessive Presupposition*

|  |
|--|
| Person A is talking to Person B about Person A's hairdresser.<br>Person A: <i>It is not true that my hairdresser's parrot is talkative. What is true is that my hairdresser's raven is talkative.</i><br><u>Evaluate this statement:</u><br>Person A is committed to a belief that their hairdresser has a parrot.<br>Options: [Agree, Disagree] |
|--|

The specific scope-taking operators were chosen to match those used in Experiment 1, to allow for comparison to that experiment. The specific conventional implicature triggers were chosen to mirror those in Syrett & Koev (2015), that also looked at methods of rejecting not-at-

issue content. Both conventional implicature and presupposition triggers were chosen to address the arguments that slurs are either conventional implicatures or presuppositions, and to give a broad range of possible presupposition triggers.

The demographic information collected about participants, construction of items without first names, choice of written rather than auditory stimuli, and placement of the triggers in the metalinguistic negation items in scare quotes are all identical to Experiment 1.

### **Procedure**

The procedure of Experiment 2 was identical to that of Experiment 1. (See Appendix E for all training trials.) After the experimental session proper, participants were asked to complete one additional brief section, providing additional demographic information. (See #1 of Appendix C for this section.) We did not ask participants to complete the two additional brief sections utilized in Experiment 1, regarding slurs' target population(s) and social taboos.

### **Predictions**

Based on the previous theoretical research on projective content, we generated the following hypotheses. First, we predicted that if the target items' 'not-at-issue' meaning projected beyond the scope operator, then participants would infer that the speaker in the scenario was committed to the belief entailed by that term, answering affirmatively, thereby making this test informative about speaker perspective. If the participant selected 'disagree', this would indicate that the 'not-at-issue' meaning of the target item had *not* projected out of the scope operator.

We then generated specific predictions based on the type of operator. When the target item was placed under propositional negation, we predicted that participants would infer that the speaker *was* committed to that belief. When the target item was placed under metalinguistic negation, we hypothesized that participants would infer that the speaker was *not* committed to that

belief. When the target item was placed under the factive verb *know*, we predicted that participants would infer that the speaker *was* committed to that belief. When the target item was placed under a verb of saying, we hypothesized that participants could answer one of two ways, depending on the type of projected content encoded in the slur. If the content is encoded as a presupposition, projection should be blocked by *say*, that would then act as a ‘plug,’ and the speaker would be assessed as *not* being committed to that belief (Potts 2015). If, however, it is encoded as a conventional implicature, projection should not be blocked by *say*, that would then act as a ‘hole,’ and the speaker would be assessed *as* being committed to that belief (Potts 2007a).

## Results

A global pandemic, COVID-19, disrupted data analysis. A Generalized Linear Mixed Model, with Bernoulli factor, in R, was run on the data from Experiment 2. This analyzed operator type (factive verb, metalinguistic negation, propositional negation, and verb of saying) and lexical item (presupposition and appositive). In Table 16, the column titled “Estimate” includes the beta coefficients. These indicated that there was a significantly high degree of agreeing – of projecting – when it came to the operators but not to the lexical items. Presuppositions and appositives projected similarly across the four operators. There were high degrees of agreeing – of projecting – for the factive verb operator (in Table 16, the “Intercept”). There were significantly low degrees of agreeing – of projecting – for the other three operators. The significant difference for propositional negation was greatest in value (regardless of valence – positive or negative) of all the operators. Metalinguistic negation and verb of saying had similar significant differences, disregarding valence.

### Table 16

*Experiment 2, Fixed Effects Generalized Linear Mixed Model – Operator Type and Lexical Item*

|                       | Estimate | Std. Error | z value | Pr(> z ) |     |
|-----------------------|----------|------------|---------|----------|-----|
| (Intercept)           | 1.9944   | 0.1984     | 10.052  | <2e-16   | *** |
| operatormeta_negation | -0.5861  | 0.2400     | -2.442  | 0.0146   | *   |
| operatorprop_negation | -2.6467  | 0.2331     | -11.352 | <2e-16   | *** |
| operatorsay_verb      | -0.4892  | 0.2426     | -2.017  | 0.0437   | *   |

Note. \*\*\* indicates significance at  $p < 0.001$ . \* indicates significance at  $p < 0.05$ .

This data was further analyzed in terms of percentages of agreement with the question asked. Table 17 validates the analysis in Table 16. Presuppositions and appositives were comparable. There was some difference with the factive verb scopal operator, with appositives more likely to project to be speaker-oriented than presuppositions.

**Table 17**

*Experiment 2, Percentages of Agreement with Question Asked*

| Operator                | Presupposition | Appositive |
|-------------------------|----------------|------------|
| Propositional negation  | 37.3%          | 32.8%      |
| Factive verb            | 78.4%          | 95.5%      |
| Metalinguistic negation | 84.3%          | 73.9%      |
| Verb of saying          | 76.1%          | 85.1%      |

This data was further investigated in terms of specific lexical items. Table 18 reveals a great deal of variability within each category of presupposition and appositive.

**Table 18**

*Experiment 2, Percentages of Agreement with Question Asked – Lexical Items*

| Operator                | Presupposition |               |            |             | Nominal appositive | Appositive                              |  |
|-------------------------|----------------|---------------|------------|-------------|--------------------|---|--|
|                         | <i>again</i>   | <i>manage</i> | possessive | <i>stop</i> |                    | Full appositive relative clause (front) | Full appositive relative clause (back) |
| Propositional negation  | 11.8%          | 38.2%         | 66.7%      | 33.3%       | 37.3%              | 48.5%                                   | 8.8%                                   |
| Factive verb            | 90.9%          | 27.3%         | 100.0%     | 94.1%       | 94.0%              | 100.0%                                  | 93.9%                                  |
| Metalinguistic negation | 96.7%          | 100.0%        | 62.2%      | 83.8%       | 64.2%              | 78.4%                                   | 90.0%                                  |
| Verb of saying          | 83.8%          | 37.8%         | 96.7%      | 93.3%       | 91.0%              | 93.3%                                   | 67.6%                                  |

**Discussion**

The results of this experiment demonstrated several things.

- A. Presuppositions and appositives projected similarly across the four scopal operators, though appositives projected slightly more with the factive verb scopal operator (it was predicted that presuppositions and appositives would project differently);
- B. The factive verb scopal operator allowed for projection, as predicted;
- C. The metalinguistic negation scopal operator allowed for projection, counter to the predictions;
- D. The propositional negation scopal operator did not allow for projection, counter to the predictions; and
- E. The verb of saying scopal operator did not allow for projection.

It is notable that the presuppositions and appositives patterned similarly. Though both are not-at-issue content, it would be expected that there would be some difference between the two. It is possible that the fact that no difference was found is because of the high rate of variability within presuppositions and appositives. It is possible that each presupposition is not as comparable to each other presupposition as was previously thought; and the same for appositives.

It is understandable that the appositives would project slightly more than the presuppositions for the factive verb scopal operator, as appositives are usually speaker-oriented. It is notable that both propositional negation and metalinguistic negation did not behave as predicted. It is possible that the participants misunderstood these, as negation is very reliant on nuances such as prosody and focus. It is notable that while both did not behave as predicted, they did not behave similarly. Participants may have realized that propositional and metalinguistic negation are different, but may not have realized in what way they are different. And it is notable that the

presuppositions projected past the verb of saying, whereas they are generally understood not to be able to do so. It is possible that participants misunderstood the form of the verb of saying, interpreting it not as indirect speech. It is also possible that this is due to a high rate of variability within the category of presuppositions.

In comparison to Experiment 1, it is notable that slurs were not comparable to either presuppositions nor to appositives, meaning that the slur-as-presupposition and slur-as-conventional-implicature (here, appositives) hypotheses cannot be validated.

### **Experiment 3**

Experiment 3 investigated whether slurs' derogatory content is at-issue or not-at-issue, as revealed through slurs' behavior under rejection.

#### **Participants**

The participants of Experiment 3 were identical to those in Experiment 1. The data of 50 university undergraduates was gathered and included. 26 subjects' data was excluded because subjects responded to at least two out of six training items incorrectly, or because subjects took more than 30 minutes to complete the study.

#### **Stimuli**

The experimental design manipulated one factor within participants: slur type (gender/sex(uality), racial/ethnic, religious, familiar non-slur insult). (See Table 19 for the complete list of lexical items.)

**Table 19***Target Lexical Items Used in Experiment 3 (Along with Works in Which They are Featured)*

| Lexical type | Lexical category   | Lexical item and paper where discussed |
|--------------|--------------------|--|
| Slur         | Gender/sex(uality) | <i>bitch</i> (Croom 2013)              |
|              |                    | <i>dyke</i> (Blakemore 2015)           |
|              |                    | <i>faggot</i> (Croom 2013)             |
|              | Racial/ethnic      | <i>slut</i> (Croom 2013)               |
|              |                    | <i>boche</i> (Anderson & Lepore 2013)  |
|              |                    | <i>curry muncher</i> (DiFranco 2015)   |
|              |                    | <i>honky</i> (Potts 2007b)             |
|              |                    | <i>nigger</i> (Croom 2013)             |
|              | Religious          | <i>kike</i> (Anderson & Lepore 2013)   |
|              |                    | <i>papist</i>                          |
|              |                    | <i>proddie</i>                         |
|              |                    | <i>towelhead</i>                       |
|              |                    | <i>thug</i> (Kukla 2018)               |
| Insult       | Familiar           | <i>bastard</i> (Potts 2007b)           |
|              |                    | <i>douchebag</i> (James 1998)          |
|              |                    | <i>fucker</i> (Croom 2013)             |
|              |                    | <i>piece of shit</i> (Blakemore 2015)  |

Each trial had the same structure. As in Experiment 1, they began with a one-sentence definition of the term featured in the trial, followed by a one-sentence description of background about one or more individuals in a discourse context (Person A, Person B, and/or the coworker), leading directly into a brief dialogue featuring those individuals in which Person A used the target term, finishing with a categorization-and-rank question based on this context. The definition ensured that all participants equally understood the meaning (target group) and derogatory force of the term. The definitions were formed in the same manner as in Experiment 1. Each trial included one target item. (See Table 20 for a sample target trial, and see Appendix F for all experimental trials.) Each subject responded to 16 total items, in a pseudorandomized order.

**Table 20**

*Sample Target Trial from Experiment 3, with Gender/sex(uality) Slur 'Bitch'*

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Background: 'Bitch' is a derogatory term that frequently refers to women.

Person A is talking to Person B about Person A's coworker.

Person A: *That bitch mowed her lawn yesterday.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: (see Table 21)]

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The specific possible responses in the categorization-and-rank question were chosen to vary between the categories of repetition (of the slur)/no repetition, indirect ('hey, wait a minute')/direct, and use-focus (targeting the use of the slur for negation as 'politically incorrect', as in metalinguistic negation)/application-focus (targeting the application of the slur to the target for negation as infelicitous because of the target's demographics, as in propositional negation). (See Table 21 for a list of these categories.) The combinations of different categories lead to different possible readings of the responses. (See Table 22 for a list of these readings.) The responses were chosen to address the hypothesis that slurs carry such a negative connotation that even in rejecting them the speaker would prefer not to use them. And, Syrett & Koev (2015) have shown that 'hey, wait a minute' – the indirect response most often used in response to not-at-issue content – is also used in response to assertions, to save face, though less so than to not-at-issue content. This addresses the hypothesis that slurs are not-at-issue content.

**Table 21***Categorization-And-Rank Response Options in Experiment 3 and Experiment 4*

| Categories    |                 |                   | Example (with <i>bitch</i> )                                |
|---------------|-----------------|-------------------|---|
| No repetition | Direct          | Use-focus         | That's not appropriate. She's a woman.                      |
| Repetition    | Direct          | Application-focus | That's not appropriate. She's not a bitch.                  |
| Repetition    | Direct          | Use-focus         | That's not appropriate. She's not a 'bitch,' she's a woman. |
| No repetition | Indirect (HWAM) | Use-focus         | Hey, wait a minute. She's a woman.                          |
| Repetition    | Indirect (HWAM) | Application-focus | Hey, wait a minute. She's not a bitch.                      |
| Repetition    | Indirect (HWAM) | Use-focus         | Hey, wait a minute. She's not a 'bitch,' she's a woman.     |

*Note.* HWAM refers to the 'Hey, wait a minute' test.

**Table 22***Readings of Categorization-And-Rank Response Options in Experiment 3 and Experiment 4*

| Category          | Original statement                  | Potential reading   |
|-------------------|-------------------------------------|---|
| Use-focus         | She's a woman.                      | You can't use that word, that's a slur.                     |
| Application-focus | She's not a bitch.                  | She specifically isn't a bitch, but my neighbor is a bitch. |
| Use-focus         | She's not a 'bitch,' she's a woman. | You can't use that word, that's a slur.                     |

The specific slurs were chosen to match those used in Experiment 1. Invented/potentially new slurs, invented non-slur insults, appropriated slurs, and slurs used infelicitously were not included. All slurs were the same part of speech (nouns), as in Experiment 1. Insults were included as in Experiment 1. The demographic information collected about participants allowed for us to control for participants' identities affecting their responses and leading to readings of appropriation. All slurs were written as single terms using the dialect of 'standard' American English, as in Experiment 1. Items were constructed so as to avoid the use of first names, as in Experiment 1.

Finally, we presented the items in print on the computer screen instead of presenting auditory stimuli either in place of or alongside of the written stimuli, as in Experiment 1. We placed the slurs appearing in the metalinguistic negation items in scare quotes, compared to those slurs appearing in the propositional negation items, not in scare quotes, as in Experiment 1.

### **Procedure**

The procedure of Experiment 3 was identical to that of Experiment 2. (See Appendix G for all training trials.)

### **Predictions**

Based on the previous theoretical research on slurs, we generated the following hypotheses. First, we predicted that if the derogatory content of slurs is not-at-issue, then participants would prefer indirect rejection over direct rejection, as in Syrett & Koev (2015). Second, we predicted that if slurs are ineffable, then participants would prefer no repetition responses over repetition responses. Third, we predicted that if participants would prefer to be unambiguously socially correct, then they would choose a use-focus response. Finally, we were interested in determining whether all slurs pattern as a coherent natural class or not.

### **Results**

A global pandemic, COVID-19, disrupted data analysis. A chi-square was run on the data from Experiment 3, and analyzed lexical item (slur and insult) and response category (“I would say” and “I would not say”). This chi-square was 255.9 ( $df = 13$ ) with a  $p$ -value  $< 2.2e-16$ , and was highly significant. As in Table 23, there was a significant distribution in participants choosing “I would say” versus “I would not say” for slurs and insults.

**Table 23***Experiment 3, Chi-Square Contingency Table – Lexical Item and Response Category*

|            | Insult | Slur |
|------------|--------|------|
| 1_0_1_RANK | 53     | 428  |
| 1_0_2_RANK | 141    | 325  |
| 1_0_3_RANK | 62     | 326  |
| 1_0_4_RANK | 32     | 202  |
| 1_0_5_RANK | 127    | 204  |
| 1_0_6_RANK | 56     | 215  |
| 1_0_GROUP  | 189    | 590  |
| 1_1_1_RANK | 147    | 172  |
| 1_1_2_RANK | 59     | 275  |
| 1_1_3_RANK | 138    | 274  |
| 1_1_4_RANK | 168    | 398  |
| 1_1_5_RANK | 73     | 396  |
| 1_1_6_RANK | 144    | 385  |
| 1_1_GROUP  | 195    | 557  |

This data was further investigated in terms of whether direct rejection was allowed by participants, whether metalinguistic negation (use-focus) or propositional negation (application-focus) was preferred by participants, and whether repetition rejection was allowed by participants. Table 24 shows that slurs elicit more direct rejection, more use-focus rejection, and more repetition rejection than insults do.

**Table 24***Experiment 3, Percentages of Types of Rejection*

|                      | Slur               |               |           | Insult |
|----------------------|--------------------|---------------|-----------|--------|
|                      | Gender/sex(uality) | Racial/ethnic | Religious | Known  |
| Direct rejection     | 63.2%              | 63.3%         | 63.8%     | 55.0%  |
| Use-focus rejection  | 60.0%              | 71.8%         | 75.0%     | 43.1%  |
| Repetition rejection | 59.2%              | 61.4%         | 62.3%     | 52.6%  |

## Discussion

The results of this experiment demonstrated several things.

- A. Slurs elicit more direct rejection than insults, as predicted;
- B. Slurs elicit more use-focus responses than do insults, as predicted; and
- C. Slurs elicit more repetition rejection than insults, as predicted.

It is notable that even though the expressive content of slurs and insults may be not-at-issue, it is blatant and offensive enough that it warrants a direct rejection. It is notable that though participants had difficulty understanding propositional and metalinguistic negation in Experiments 1 and 2, they appeared to not have trouble differentiating between use-focus and application-focus rejections, which after all are mirror images of propositional and metalinguistic negation. The behavior of these negations would be an interesting subject for further research. It is notable that this experiment indicates that slurs may not be as ineffable as previously thought, as participants allowed for repetition most of the time. It is possible that this may be different if participants are asked to speak their rejections aloud. This experiment indicates that participants are willing to repeat these slurs (and insults) in rejection, not that they actually do so.

#### **Experiment 4**

Experiment 4 served as a control to Experiment 3 by investigating non-slurs.

#### **Participants**

The participants of Experiment 4 were identical to those in Experiment 1. The data of 45 university undergraduates was gathered and included. 26 subjects' data was excluded because subjects responded to at least two out of six training items incorrectly, or because subjects took more than 30 minutes to complete the study.

#### **Stimuli**

The experimental design manipulated one factor within participants: presupposition trigger (possessive, *again*, *stop*, *manage*) or conventional implicature trigger (nominal appositive, full

appositive relative clause) or at-issue statement. (See Table 25 for the complete list of lexical items.)

**Table 25**

*Target Lexical Items Used in Experiment 4 (Along with Works in Which They are Featured)*

| Control type                    | Lexical item and paper where discussed  |
|---------------------------------|---|
| Presupposition                  | <i>my</i> (possessive)<br><i>again</i><br><i>stop</i><br><i>manage</i>  |
| Nominal appositive              | ' <i>my aunt, an</i> appositive, x' (Syrett & Koev 2015)  |
| Full appositive relative clause | ' <i>my aunt, who</i> appositive, x' (front of statement) (Syrett & Koev 2015)<br>' <i>my aunt has a x, who</i> appositive' (end of statement) (Syrett & Koev 2015) |
| At-issue                        | ' <i>my aunt x</i> 'ed' (past tense)  |

The trials of Experiment 4 were identical to those in Experiment 3. (See Table 26 for a sample target trial, and see Appendix H for all experimental trials.) Each subject responded to 24 total items.

**Table 26**

*Sample Target Trial from Experiment 4, with Possessive Presupposition*

|   |
|---|
| Person A is talking to Person B about Person A's aunt.<br>Person A: <i>My aunt fed my dog a bacon treat.</i><br><u>If you were Person B, what would you say to disagree with Person A?</u><br>Options: [I would say OR I would not say: (see Table 21)] |
|---|

The specific possible responses in the categorization-and-rank question were chosen to match those in Experiment 3, to allow for comparison with that experiment. The specific presupposition and conventional implicature triggers were chosen to match those used in Experiment 2. At-issue statements were included to compare to the not-at-issue (presupposition and conventional implicature) triggers, and because Syrett & Koev (2015) found differences in patterns of rejection between at-issue and not-at-issue content.

The demographic information collected about participants, construction of items without first names, choice of written rather than auditory stimuli, and placement of the triggers in the metalinguistic negation items in scare quotes are all identical to Experiment 1.

### **Procedure**

The procedure of Experiment 4 was identical to that of Experiment 2. (See Appendix I for all training trials.)

### **Predictions**

Based on the previous theoretical research on rejection (Syrett & Koev 2015), we generated the following hypotheses. First, we predicted that participants would prefer indirect rejections over direct rejections for all items, but more so for not-at-issue items, as in Syrett & Koev's (2015). Second, we predicted that if participants would prefer to be unambiguously socially correct, then they would choose a use-focus response.

### **Results**

A global pandemic, COVID-19, disrupted data analysis. A chi-square was run on the data from Experiment 4, and analyzed lexical item (presupposition, appositive, and at-issue content) and response category ("I would say" and "I would not say"). This chi-square was 954.17 ( $df = 918$ ) with a  $p$ -value  $< 0.198$ , and was insignificant.

This data was further investigated in terms of whether direct rejection was allowed by participants, whether metalinguistic negation (use-focus) or propositional negation (application-focus) was preferred by participants, and whether repetition rejection was allowed by participants. Table 27 shows that presuppositions, appositives, and at-issue content are all comparable in participants having a preference for indirect rejection, a weak preference for use-focus rejection, and a preference for no repetition rejection.

**Table 27***Experiment 4, Percentages of Types of Rejection*

|                      | Presupposition |               |            |             | Nominal appositive | Appositive                              |  | At-issue |
|----------------------|----------------|---------------|------------|-------------|--------------------|---|--|----------|
|                      | <i>again</i>   | <i>manage</i> | possessive | <i>stop</i> |                    | Full appositive relative clause (front) | Full appositive relative clause (back) |          |
| Direct rejection     | 42.6%          | 43.4%         | 43.5%      | 48.2%       | 44.1%              | 41.9%                                   | 46.3%                                  | 48.3%    |
| Use-focus rejection  | 65.5%          | 67.0%         | 60.5%      | 56.3%       | 65.3%              | 64.0%                                   | 64.2%                                  | 62.8%    |
| Repetition rejection | 43.2%          | 46.0%         | 42.8%      | 46.1%       | 44.4%              | 42.6%                                   | 45.1%                                  | 47.6%    |

**Discussion**

The results of this experiment demonstrated several things, especially in comparison to Experiment 3.

- A. Presuppositions, appositives, and at-issue content are comparable in eliciting more indirect rejection;
- B. Presuppositions, appositives, and at-issue content are comparable in eliciting more use-focus responses; and
- C. Presuppositions, appositives, and at-issue content are comparable in eliciting more no repetition rejection.

It is notable that the presuppositions, appositives, and at-issue content patterned similarly. It would be expected that there would be some difference between the three. This is notable in that it contradicts prior research on the rejection of not-at-issue and at-issue content (Syrett & Koev 2015); however, in light of the variation seen in these categories in Experiment 2, it is possible

that presuppositions are simply not as comparable to other presuppositions as previously thought, and the same for appositives.

In comparison to Experiment 3, it is notable that slurs and insults elicit more direct rejection and more repetition rejection than the control items in Experiment 4; and that slurs elicit more use-focus rejection than the control items, which in turn elicit more use-focus rejection than insults.

### **General Discussion and Conclusions**

In this study, we investigated slurs' place in the linguistic taxonomy. We reviewed the theoretical properties of slurs, situating slurs as capable of projection, as requiring felicity, and as capable of appropriation. We described slurs' dual expressive and descriptive dimensions, and how these feed into the formation of slurs' nonpejorative correlates. We touched on the unique arguments about nonpejorative correlates as family resemblance categories and as differentiated between racial and gendered (Croom 2013, 2015; Diaz Legaspe 2018). We laid out the three main slur theories, including non-content-based theories, narrow/semantic content-based theories, and wide/pragmatic content-based theories, along with their counterarguments. Though there is little experimental work on slurs, we discussed the few more recent studies which take slurs as their subject. On the basis of this theoretical work, and the gaps in the experimental work, we created the current study.

We asked whether slurs' expressive content projects and whether slurs defy direct rejection. Building on the theoretical properties of slurs and theories about the placement of slurs' expressive content, we designed four studies which presented slurs of various demographics in naturalistic exchanges and contrasted these with naturalistic exchanges featuring insults, presuppositions, appositives, and at-issue content. Participants determined whether lexical items

were speaker-oriented, and delineated how they might object or how they might not object to lexical items.

The combined findings of the experiments, demonstrated that slurs behaved differently from insults, counter to Potts (2007)'s position that slurs and insults are both identical expressives, that the four scopal operators utilized in the experiments had different projective behavior, and that different demographic categories of slurs behaved differently, which partially supports Diaz Legaspe (2018)'s position. The findings of the experiments were not sufficient to support the slur-as-presupposition hypothesis, unlike other recent experimental work on slurs (Cepollaro, Sulpizio, & Bianchi 2019). These experiments address previously unexplored aspects of slur taxonomy, and could therefore be used as a basis for further research in this area in the future.

It would be worthwhile to investigate the variability within each slur demographic category, and to better understand the nuances of propositional and metalinguistic negation. Slurs were not directly comparable to presuppositions or appositives in these experiments. Though slurs did not project out of the verb of saying, as presuppositions ought not to, the presuppositions did project out of the verb of saying. This marks an inconclusive result which begs for more investigation. Much of the investigation into the repetition of slurs must also be understood in the context of an experiment conducted entirely in writing. As evidenced by people who tweet slurs but do not say them aloud, just because someone is willing to write a slur does not mean that they are willing to say a slur aloud, even in rejection. Given the mixed results from propositional and metalinguistic negation, it would be interesting to probe whether participants truly understand the difference between use-focus and application-focus responses, which after all are meant to be mirror images of metalinguistic negation and propositional negation.

Slurs' linguistic taxonomy is experimentally underexplored, leaving the field wide-open for experimentation and creativity. Further studies are needed to identify an experimentally-supported slur theory, to confirm slurs' theoretical properties, to explain appropriation in the context of slur theory, to differentiate between demographic slurs and between slurs and other insults. With so little experimental work done, all questions are valid and must be answered.

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### Glossary

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### Appendix A: Experimental stimuli in Experiment 1

#### 1. Operator: propositional negation

##### 1.1. Gender/sex(uality) slurs

###### 1.1.1.

Background: 'Bitch' is a derogatory term that frequently refers to women.

Person A is not a woman. Their neighbor is not a woman.

Person A: *My neighbor is not a bitch. My neighbor is a man.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because they are women.

Options: [Agree, Disagree]

###### 1.1.2.

Background: 'Slut' is a derogatory term that frequently refers to certain women who are assumed to be sexually promiscuous.

Person A is not a woman. Their neighbor is not a woman.

Person A: *My neighbor is not a slut. My neighbor is a man.*

Evaluate this statement:

Person A is committed to a belief that certain women are despicable because of their assumed sexual promiscuity.

Options: [Agree, Disagree]

###### 1.1.3.

Background: 'Faggot' is a derogatory term that frequently refers to gay (homosexual) men.

Person A is not gay. Their neighbor is not gay.

Person A: *My neighbor is not a faggot. My neighbor is straight.*

Evaluate this statement:

Person A is committed to a belief that certain men are despicable because of their homosexuality.

Options: [Agree, Disagree]

###### 1.1.4.

Background: 'Dyke' is a derogatory term that frequently refers to lesbian (homosexual) women.

Person A is not lesbian. Their neighbor is not lesbian.

Person A: *My neighbor is not a dyke. My neighbor is a man.*

Evaluate this statement:

Person A is committed to a belief that certain women are despicable because of their homosexuality.

Options: [Agree, Disagree]

##### 1.2. Racial/ethnic slurs

###### 1.2.1.

Background: 'Boche' is a derogatory term that frequently refers to Germans.

Person A is not German. Their neighbor is not German.

Person A: *My neighbor is not a boche. My neighbor is American.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their German nationality.

Options: [Agree, Disagree]

###### 1.2.2.

Background: 'Nigger' is a derogatory term that frequently refers to people of African descent. Person A is not of African descent. Their neighbor is not of African descent.

Person A: *My neighbor is not a nigger. My neighbor is Caucasian.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of they are of African descent or black.

Options: [Agree, Disagree]

1.2.3.

Background: 'Honky' is a derogatory term that frequently refers to Caucasian people.

Person A is not Caucasian. Their neighbor is not Caucasian.

Person A: *My neighbor is not a honky. My neighbor is black.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their Caucasian ethnicity.

Options: [Agree, Disagree]

1.2.4.

Background: 'Curry muncher' is a derogatory term that frequently refers to South Asians.

Person A is not South Asian. Their neighbor is not South Asian.

Person A: *My neighbor is not a curry muncher. My neighbor is Russian.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their South Asian ethnicity.

Options: [Agree, Disagree]

1.3. Religious slurs

1.3.1.

Background: 'Kike' is a derogatory term that frequently refers to Jews.

Person A is not Jewish. Their neighbor is not Jewish.

Person A: *My neighbor is not a kike. My neighbor is Christian.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their Jewish religion.

Options: [Agree, Disagree]

1.3.2.

Background: 'Towelhead' is a derogatory term that frequently refers to people who wear turbans for religious reasons.

Person A does not wear turbans for religious reasons. Their neighbor does not wear turbans for religious reasons.

Person A: *My neighbor is not a towelhead. My neighbor is a professional turban-model.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of they wear turbans for religious reasons.

Options: [Agree, Disagree]

1.3.3.

Background: 'Proddie' is a derogatory term that frequently refers to Protestant Christians.

Person A is not Protestant Christian. Their neighbor is not Protestant Christian.

Person A: *My neighbor is not a proddie. My neighbor is Catholic.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their Protestant Christian religion.

Options: [Agree, Disagree]

1.3.4.

Background: 'Papist' is a derogatory term that frequently refers to Catholics.

Person A is not Catholic. Their neighbor is not Catholic.

Person A: *My neighbor is not a papist. My neighbor is Protestant Christian.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their Catholic religion.

Options: [Agree, Disagree]

1.4. Invented/potentially new slurs

1.4.1.

Background: 'Illegal' is a derogatory term that frequently refers to undocumented immigrants.

Person A is not an undocumented immigrant. Their neighbor is not an undocumented immigrant.

Person A: *My neighbor is not an illegal. My neighbor is an exchange student.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their undocumented immigration status.

Options: [Agree, Disagree]

1.4.2.

Background: 'Thug' is a derogatory term that frequently refers to young African-American men.

Person A is not a young African-American man. Their neighbor is not a young African-American man.

Person A: *My neighbor is not a thug. My neighbor goes to an Ivy League school.*

Evaluate this statement:

Person A is committed to a belief that certain young men are despicable because they are African-American.

Options: [Agree, Disagree]

1.4.3.

Background: 'Mudblood' is a derogatory term, used in the Harry Potter universe, that frequently refers to Muggleborn witches and wizards.

Person A is not Muggleborn. Their neighbor is not Muggleborn.

Person A: *My neighbor is not a mudblood. My neighbor is a pureblood*

Evaluate this statement:

Person A is committed to a belief that certain witches and wizards are despicable because of their parentage.

Options: [Agree, Disagree]

1.4.4.

Background: 'Kukker' is a derogatory term that frequently refers to members of the Ku Klux Klan (KKK).

Person A is not a member of the KKK. Their neighbor is not a member of the KKK.

Person A: *My neighbor is not a kukker. My neighbor is a hermit, my neighbor isn't a member of any organization.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their membership in the KKK.

Options: [Agree, Disagree]

1.5. Familiar insults

1.5.1.

Background: 'Bastard' is a derogatory term that frequently refers to people.

Person A is talking to Person B.

Person A: *My neighbor is not a bastard. My neighbor is a role model.*

Evaluate this statement:

Person A is committed to a belief that it is socially-acceptable to call people 'bastard.'

Options: [Agree, Disagree]

1.5.2.

Background: 'Piece of shit' is a derogatory term that can often be used to refer to certain people.

Person A is talking to Person B.

Person A: *My neighbor is not a piece of shit. My neighbor is a loving parent.*

Evaluate this statement:

Person A is committed to a belief that it is socially-acceptable to call people 'pieces of shit.'

Options: [Agree, Disagree]

1.5.3.

Background: 'Fucker' is a derogatory term that frequently refers to people.

Person A is talking to Person B.

Person A: *My neighbor is not a fucker. My neighbor is a kind spouse.*

Evaluate this statement:

Person A is committed to a belief that it is socially-acceptable to call people 'fucker.'

Options: [Agree, Disagree]

1.5.4.

Background: 'Douchebag' is a derogatory term that frequently refers to people.

Person A is talking to Person B.

Person A: *My neighbor is not a douchebag. My neighbor is a great friend.*

Evaluate this statement:

Person A is committed to a belief that it is socially-acceptable to call people 'douchebag.'

Options: [Agree, Disagree]

1.6. Invented insults

1.6.1.

Background: 'Alienist' is a derogatory term that frequently refers to people who believe in aliens.

Person A is not an alienist. Their neighbor is not an alienist.

Person A: *My neighbor is not an alienist. My neighbor is a Nobel Prize-winning scientist.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their beliefs in aliens.

Options: [Agree, Disagree]

1.6.2.

Background: 'Nerf herder' is a derogatory term, used in the Star Wars universe, that frequently refers to people who herd nerfs, a type of animal.

Person A is not a nerf herder. Their neighbor is not a nerf herder.

Person A: *My neighbor is not a nerf herder. My neighbor is a librarian.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their job as nerf herders.

Options: [Agree, Disagree]

1.6.3.

Background: 'Dung eater' is a derogatory term, used in The Ant Bully movie, that frequently refers to people who transform into dung beetles.

Person A is talking to Person B.

Person A: *My neighbor is not a dung eater. My neighbor a brilliant magician.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because they transform into insects.

Options: [Agree, Disagree]

1.6.4.

Background: 'Bambi killer' is a derogatory term that frequently refers to deer hunters.

Person A is not deer hunters. Their neighbor is not a deer hunter.

Person A: *My neighbor is not a Bambi killer. My neighbor is a bird watcher.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because they hunt deer.

Options: [Agree, Disagree]

2. Operator: metalinguistic negation

2.1. Gender/sex(uality) slurs

2.1.1.

Background: 'Dyke' is a derogatory term that frequently refers to lesbian (homosexual) women.

Person A is not lesbian. Their neighbor is lesbian.

Person A: *My neighbor is not a 'dyke.' My neighbor is a lesbian.*

Evaluate this statement:

Person A is committed to a belief that certain women are despicable because of their homosexuality.

Options: [Agree, Disagree]

2.1.2.

Background: 'Bitch' is a derogatory term that frequently refers to women.

Person A is not a woman. Their neighbor is a woman.

Person A: *My neighbor is not a 'bitch.' My neighbor is a woman.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because they are women.

Options: [Agree, Disagree]

2.1.3.

Background: 'Slut' is a derogatory term that frequently refers to certain women who are assumed to be sexually promiscuous.

Person A is not a woman. Their neighbor is a woman.

Person A: *My neighbor is not a 'slut.' My neighbor is a woman.*

Evaluate this statement:

Person A is committed to a belief that certain women are despicable because of their assumed sexual promiscuity.

Options: [Agree, Disagree]

2.1.4.

Background: 'Faggot' is a derogatory term that frequently refers to gay (homosexual) men.

Person A is not gay. Their neighbor is gay.

Person A: *My neighbor is not a 'faggot.'* *My neighbor is gay.*

Evaluate this statement:

Person A is committed to a belief that certain men are despicable because of their homosexuality.

Options: [Agree, Disagree]

2.2. Racial/ethnic slurs

2.2.1.

Background: 'Curry muncher' is a derogatory term that frequently refers to South Asians.

Person A is not South Asian. Their neighbor is South Asian.

Person A: *My neighbor is not a 'curry muncher.'* *My neighbor is South Asian.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their South Asian ethnicity.

Options: [Agree, Disagree]

2.2.2.

Background: 'Boche' is a derogatory term that frequently refers to Germans.

Person A is not German. Their neighbor is German.

Person A: *My neighbor is not a 'boche.'* *My neighbor is German.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their German nationality.

Options: [Agree, Disagree]

2.2.3.

Background: 'Nigger' is a derogatory term that frequently refers to people of African descent.

Person A is not of African descent. Their neighbor is of African descent.

Person A: *My neighbor is not a 'nigger.'* *My neighbor goes is black.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of they are of African descent or black.

Options: [Agree, Disagree]

2.2.4.

Background: 'Honky' is a derogatory term that frequently refers to Caucasian people.

Person A is not Caucasian. Their neighbor is Caucasian.

Person A: *My neighbor is not a 'honky.'* *My neighbor is white.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their Caucasian ethnicity.

Options: [Agree, Disagree]

2.3. Religious slurs

2.3.1.

Background: 'Papist' is a derogatory term that frequently refers to Catholics.

Person A is not Catholic. Their neighbor is Catholic.

Person A: *My neighbor is not a 'papist.'* *My neighbor is Catholic.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their Catholic religion.

Options: [Agree, Disagree]

2.3.2.

Background: 'Kike' is a derogatory term that frequently refers to Jews.

Person A is not Jewish. Their neighbor is Jewish.

Person A: *My neighbor is not a 'kike.'* *My neighbor is Jewish.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their Jewish religion.

Options: [Agree, Disagree]

2.3.3.

Background: 'Towelhead' is a derogatory term that frequently refers to people who wear turbans for religious reasons.

Person A does not wear turbans for religious reasons. Their neighbor does wear turbans for religious reasons.

Person A: *My neighbor is not a 'towelhead.'* *My neighbor wears turbans for religious reasons.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of they wear turbans for religious reasons.

Options: [Agree, Disagree]

2.3.4.

Background: 'Proddie' is a derogatory term that frequently refers to Protestant Christians.

Person A is not Protestant Christian. Their neighbor is Protestant Christian.

Person A: *My neighbor is not a 'proddie.'* *My neighbor is Protestant Christian.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their Protestant Christian religion.

Options: [Agree, Disagree]

2.4. Invented/potentially new slurs

2.4.1.

Background: 'Kukker' is a derogatory term that frequently refers to members of the Ku Klux Klan (KKK).

Person A is not a member of the KKK. Their neighbor is a member of the KKK.

Person A: *My neighbor is not a 'kukker.'* *My neighbor is a member of the KKK.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their membership in the KKK.

Options: [Agree, Disagree]

2.4.2.

Background: 'Illegal' is a derogatory term that frequently refers to undocumented immigrants.

Person A is not an undocumented immigrant. Their neighbor is an undocumented immigrant.

Person A: *My neighbor is not an 'illegal.' My neighbor is an undocumented immigrant.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their undocumented immigration status.

Options: [Agree, Disagree]

2.4.3.

Background: 'Thug' is a derogatory term that frequently refers to young African-American men. Person A is not a young African-American man. Their neighbor is a young African-American man.

Person A: *My neighbor is not a 'thug.' My neighbor goes to a young African-American man.*

Evaluate this statement:

Person A is committed to a belief that certain young men are despicable because they are African-American.

Options: [Agree, Disagree]

2.4.4.

Background: 'Mudblood' is a derogatory term, used in the Harry Potter universe, that frequently refers to Muggleborn witches and wizards.

Person A is not Muggleborn. Their neighbor is Muggleborn.

Person A: *My neighbor is not a 'mudblood.' My neighbor is a Muggleborn.*

Evaluate this statement:

Person A is committed to a belief that certain witches and wizards are despicable because of their parentage.

Options: [Agree, Disagree]

2.5. Familiar insults

2.5.1.

Background: 'Douchebag' is a derogatory term that frequently refers to people.

Person A is talking to Person B.

Person A: *My neighbor is not a 'douchebag.' My neighbor is a jerk.*

Evaluate this statement:

Person A is committed to a belief that it is socially-acceptable to call people 'douchebag.'

Options: [Agree, Disagree]

2.5.2.

Background: 'Bastard' is a derogatory term that frequently refers to people.

Person A is talking to Person B.

Person A: *My neighbor is not a 'bastard.' My neighbor is a moron.*

Evaluate this statement:

Person A is committed to a belief that it is socially-acceptable to call people 'bastard.'

Options: [Agree, Disagree]

2.5.3.

Background: 'Piece of shit' is a derogatory term that can often be used to refer to certain people.

Person A is talking to Person B.

Person A: *My neighbor is not a 'piece of shit.' My neighbor is an idiot.*

Evaluate this statement:

Person A is committed to a belief that it is socially-acceptable to call people 'pieces of shit.'

Options: [Agree, Disagree]

2.5.4.

Background: 'Fucker' is a derogatory term that frequently refers to people.

Person A is talking to Person B.

Person A: *My neighbor is not a 'fucker.'* *My neighbor is a fool.*

Evaluate this statement:

Person A is committed to a belief that it is socially-acceptable to call people 'fucker.'

Options: [Agree, Disagree]

2.6. Invented insults

2.6.1.

Background: 'Bambi killer' is a derogatory term that frequently refers to deer hunters.

Person A is not a deer hunter. Their neighbor is a deer hunter.

Person A: *My neighbor is not a 'Bambi killer.'* *My neighbor is a deer hunter.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because they hunt deer.

Options: [Agree, Disagree]

2.6.2.

Background: 'Alienist' is a derogatory term that frequently refers to people who believe in aliens.

Person A is not an alienist. Their neighbor is an alienist.

Person A: *My neighbor is not an 'alienist.'* *My neighbor is a layperson researching extraterrestrial life.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their beliefs in aliens.

Options: [Agree, Disagree]

2.6.3.

Background: 'Nerf herder' is a derogatory term, used in the Star Wars universe, that frequently refers to people who herd nerfs, a type of animal.

Person A is not a nerf herder. Their neighbor is a nerf herder.

Person A: *My neighbor is not a 'nerf herder.'* *My neighbor specializes in the care of nerfs.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their job as nerf herders.

Options: [Agree, Disagree]

2.6.4.

Background: 'Dung eater' is a derogatory term, used in The Ant Bully movie, that frequently refers to people who transform into dung beetles.

Person A is talking to Person B.

Person A: *My neighbor is not a 'dung eater.'* *My neighbor can transform into an insect.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because they transform into insects.

Options: [Agree, Disagree]

3. Operator: factive verb

3.1. Gender/sex(uality) slurs

3.1.1.

Background: 'Faggot' is a derogatory term that frequently refers to gay (homosexual) men.

Person A and their friend are not gay. Person A's neighbor is gay.

Person A: *My friend knows that my neighbor is a faggot.*

Evaluate this statement:

Person A is committed to a belief that certain men are despicable because of their homosexuality.

Options: [Agree, Disagree]

3.1.2.

Background: 'Dyke' is a derogatory term that frequently refers to lesbian (homosexual) women.

Person A and their friend are not lesbian. Person A's neighbor is lesbian.

Person A: *My friend knows that my neighbor is a dyke.*

Evaluate this statement:

Person A is committed to a belief that certain women are despicable because of their homosexuality.

Options: [Agree, Disagree]

3.1.3.

Background: 'Bitch' is a derogatory term that frequently refers to women.

Person A and their friend are not women. Person A's neighbor is a woman.

Person A: *My friend knows that my neighbor is a bitch.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because they are women.

Options: [Agree, Disagree]

3.1.4.

Background: 'Slut' is a derogatory term that frequently refers to certain women who are assumed to be sexually promiscuous.

Person A and their friend are not women. Person A's neighbor is a woman.

Person A: *My friend knows that my neighbor is a slut.*

Evaluate this statement:

Person A is committed to a belief that certain women are despicable because of their assumed sexual promiscuity.

Options: [Agree, Disagree]

3.2. Racial/ethnic slurs

3.2.1.

Background: 'Honky' is a derogatory term that frequently refers to Caucasian people.

Person A and their friend are not Caucasian. Person A's neighbor is Caucasian.

Person A: *My friend knows that my neighbor is a honky.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their Caucasian ethnicity.

Options: [Agree, Disagree]

3.2.2.

Background: 'Curry muncher' is a derogatory term that frequently refers to South Asians.

Person A and their friend are not South Asian. Person A's neighbor is South Asian.

Person A: *My friend knows that my neighbor is a curry muncher.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their South Asian ethnicity.

Options: [Agree, Disagree]

3.2.3.

Background: 'Boche' is a derogatory term that frequently refers to Germans.

Person A and their friend are not German. Person A's neighbor is German.

Person A: *My friend knows that my neighbor is a boche.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their German nationality.

Options: [Agree, Disagree]

3.2.4.

Background: 'Nigger' is a derogatory term that frequently refers to people of African descent.

Person A and their friend are not of African descent. Person A's neighbor is of African descent.

Person A: *My friend knows that my neighbor is a nigger.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of they are of African descent or black.

Options: [Agree, Disagree]

3.3. Religious slurs

3.3.1.

Background: 'Proddie' is a derogatory term that frequently refers to Protestant Christians.

Person A and their friend are not Protestant Christian. Person A's neighbor is Protestant Christian.

Person A: *My friend knows that my neighbor is a proddie.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their Protestant Christian religion.

Options: [Agree, Disagree]

3.3.2.

Background: 'Papist' is a derogatory term that frequently refers to Catholics.

Person A and their friend are not Catholic. Person A's neighbor is Catholic.

Person A: *My friend knows that my neighbor is a papist.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their Catholic religion.

Options: [Agree, Disagree]

3.3.3.

Background: 'Kike' is a derogatory term that frequently refers to Jews.

Person A and their friend are not Jewish. Person A's neighbor is Jewish.

Person A: *My friend knows that my neighbor is a kike.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their Jewish religion.

Options: [Agree, Disagree]

## 3.3.4.

Background: 'Towelhead' is a derogatory term that frequently refers to people who wear turbans for religious reasons.

Person A and their friend do not wear turbans for religious reasons. Person A's neighbor does wear turbans for religious reasons.

Person A: *My friend knows that my neighbor is a towelhead.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of they wear turbans for religious reasons.

Options: [Agree, Disagree]

## 3.4. Invented/potentially new slurs

## 3.4.1.

Background: 'Mudblood' is a derogatory term, used in the Harry Potter universe, that frequently refers to Muggleborn witches and wizards.

Person A and their friend are not Muggleborn. Person A's neighbor is Muggleborn.

Person A: *My friend knows that my neighbor is a mudblood.*

Evaluate this statement:

Person A is committed to a belief that certain witches and wizards are despicable because of their parentage.

Options: [Agree, Disagree]

## 3.4.2.

Background: 'Kukker' is a derogatory term that frequently refers to members of the Ku Klux Klan (KKK).

Person A and their friend are not members of the KKK. Person A's neighbor is a member of the KKK.

Person A: *My friend knows that my neighbor is a kukker.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their membership in the KKK.

Options: [Agree, Disagree]

## 3.4.3.

Background: 'Illegal' is a derogatory term that frequently refers to undocumented immigrants.

Person A and their friend are not undocumented immigrants. Person A's neighbor is an undocumented immigrant.

Person A: *My friend knows that my neighbor is an illegal.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their undocumented immigration status.

Options: [Agree, Disagree]

## 3.4.4.

Background: 'Thug' is a derogatory term that frequently refers to young African-American men.

Person A and their friend are not young African-American men. Person A's neighbor is a young African-American man.

Person A: *My friend knows that my neighbor is a thug.*

Evaluate this statement:

Person A is committed to a belief that certain young men are despicable because they are African-American.

Options: [Agree, Disagree]

### 3.5. Familiar insults

#### 3.5.1.

Background: 'Fucker' is a derogatory term that frequently refers to people.

Person A is talking to Person B.

Person A: *My friend knows that my neighbor is a fucker.*

Evaluate this statement:

Person A is committed to a belief that it is socially-acceptable to call people 'fucker.'

Options: [Agree, Disagree]

#### 3.5.2.

Background: 'Douchebag' is a derogatory term that frequently refers to people.

Person A is talking to Person B.

Person A: *My friend knows that my neighbor is a douchebag.*

Evaluate this statement:

Person A is committed to a belief that it is socially-acceptable to call people 'douchebag.'

Options: [Agree, Disagree]

#### 3.5.3.

Background: 'Bastard' is a derogatory term that frequently refers to people.

Person A is talking to Person B.

Person A: *My friend knows that my neighbor is a bastard.*

Evaluate this statement:

Person A is committed to a belief that it is socially-acceptable to call people 'bastard.'

Options: [Agree, Disagree]

#### 3.5.4.

Background: 'Piece of shit' is a derogatory term that can often be used to refer to certain people.

Person A is talking to Person B.

Person A: *My friend knows that my neighbor is a piece of shit.*

Evaluate this statement:

Person A is committed to a belief that it is socially-acceptable to call people 'pieces of shit.'

Options: [Agree, Disagree]

### 3.6. Invented insults

#### 3.6.1.

Background: 'Dung eater' is a derogatory term, used in The Ant Bully movie, that frequently refers to people who transform into dung beetles.

Person A is talking to Person B.

Person A: *My friend knows that my neighbor is a dung eater.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because they transform into insects.

Options: [Agree, Disagree]

#### 3.6.2.

Background: 'Bambi killer' is a derogatory term that frequently refers to deer hunters.

Person A and their friend are not deer hunters. Person A's neighbor is a deer hunter.

Person A: *My friend knows that my neighbor is a Bambi killer.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because they hunt deer.

Options: [Agree, Disagree]

3.6.3.

Background: 'Alienist' is a derogatory term that frequently refers to people who believe in aliens.

Person A and their friend are not alienists. Person A's neighbor is an alienist.

Person A: *My friend knows that my neighbor is an alienist.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their beliefs in aliens.

Options: [Agree, Disagree]

3.6.4.

Background: 'Nerf herder' is a derogatory term, used in the Star Wars universe, that frequently refers to people who herd nerfs, a type of animal.

Person A and their friend are not nerf herders. Person A's neighbor is a nerf herder.

Person A: *My friend knows that my neighbor is a nerf herder.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their job as nerf herders.

Options: [Agree, Disagree]

4. Operator: verb of saying

4.1. Gender/sex(uality) slurs

4.1.1.

Background: 'Slut' is a derogatory term that frequently refers to certain women who are assumed to be sexually promiscuous.

Person A and their friend are not women. Person A's neighbor is a woman.

Person A: *My friend said that my neighbor is a slut.*

Evaluate this statement:

Person A is committed to a belief that certain women are despicable because of their assumed sexual promiscuity.

Options: [Agree, Disagree]

4.1.2.

Background: 'Faggot' is a derogatory term that frequently refers to gay (homosexual) men.

Person A and their friend are not gay. Person A's neighbor is gay.

Person A: *My friend said that my neighbor is a faggot.*

Evaluate this statement:

Person A is committed to a belief that certain men are despicable because of their homosexuality.

Options: [Agree, Disagree]

4.1.3.

Background: 'Dyke' is a derogatory term that frequently refers to lesbian (homosexual) women.

Person A and their friend are not lesbian. Person A's neighbor is lesbian.

Person A: *My friend said that my neighbor is a dyke.*

Evaluate this statement:

Person A is committed to a belief that certain women are despicable because of their homosexuality.

Options: [Agree, Disagree]

4.1.4.

Background: 'Bitch' is a derogatory term that frequently refers to women.

Person A and their friend are not women. Person A's neighbor is a woman.

Person A: *My friend said that my neighbor is a bitch.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because they are women.

Options: [Agree, Disagree]

4.2. Racial/ethnic slurs

4.2.1.

Background: 'Nigger' is a derogatory term that frequently refers to people of African descent.

Person A and their friend are not of African descent. Person A's neighbor is of African descent.

Person A: *My friend said that my neighbor is a nigger.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of they are of African descent or black.

Options: [Agree, Disagree]

4.2.2.

Background: 'Honky' is a derogatory term that frequently refers to Caucasian people.

Person A and their friend are not Caucasian. Person A's neighbor is Caucasian.

Person A: *My friend said that my neighbor is a honky.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their Caucasian ethnicity.

Options: [Agree, Disagree]

4.2.3.

Background: 'Curry muncher' is a derogatory term that frequently refers to South Asians.

Person A and their friend are not South Asian. Person A's neighbor is South Asian.

Person A: *My friend said that my neighbor is a curry muncher.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their South Asian ethnicity.

Options: [Agree, Disagree]

4.2.4.

Background: 'Boche' is a derogatory term that frequently refers to Germans.

Person A and their friend are not German. Person A's neighbor is German.

Person A: *My friend said that my neighbor is a boche.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their German nationality.

Options: [Agree, Disagree]

4.3. Religious slurs

4.3.1.

Background: 'Towelhead' is a derogatory term that frequently refers to people who wear turbans for religious reasons.

Person A and their friend do not wear turbans for religious reasons. Person A's neighbor does wear turbans for religious reasons.

Person A: *My friend said that my neighbor is a towelhead.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of they wear turbans for religious reasons.

Options: [Agree, Disagree]

4.3.2.

Background: 'Proddie' is a derogatory term that frequently refers to Protestant Christians.

Person A and their friend are not Protestant Christian. Person A's neighbor is Protestant Christian.

Person A: *My friend said that my neighbor is a proddie.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their Protestant Christian religion.

Options: [Agree, Disagree]

4.3.3.

Background: 'Papist' is a derogatory term that frequently refers to Catholics.

Person A and their friend are not Catholic. Person A's neighbor is Catholic.

Person A: *My friend said that my neighbor is a papist.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their Catholic religion.

Options: [Agree, Disagree]

4.3.4.

Background: 'Kike' is a derogatory term that frequently refers to Jews.

Person A and their friend are not Jewish. Person A's neighbor is Jewish.

Person A: *My friend said that my neighbor is a kike.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their Jewish religion.

Options: [Agree, Disagree]

4.4. Invented/potentially new slurs

4.4.1.

Background: 'Thug' is a derogatory term that frequently refers to young African-American men.

Person A and their friend are not young African-American men. Person A's neighbor is a young African-American man.

Person A: *My friend said that my neighbor is a thug.*

Evaluate this statement:

Person A is committed to a belief that certain young men are despicable because they are African-American.

Options: [Agree, Disagree]

4.4.2.

Background: 'Mudblood' is a derogatory term, used in the Harry Potter universe, that frequently refers to Muggleborn witches and wizards.

Person A and their friend are not Muggleborn. Person A's neighbor is Muggleborn.

Person A: *My friend said that my neighbor is a mudblood.*

Evaluate this statement:

Person A is committed to a belief that certain witches and wizards are despicable because of their parentage.

Options: [Agree, Disagree]

4.4.3.

Background: 'Kukker' is a derogatory term that frequently refers to members of the Ku Klux Klan (KKK).

Person A and their friend are not members of the KKK. Person A's neighbor is a member of the KKK.

Person A: *My friend said that my neighbor is a kukker.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their membership in the KKK.

Options: [Agree, Disagree]

4.4.4.

Background: 'Illegal' is a derogatory term that frequently refers to undocumented immigrants.

Person A and their friend are not undocumented immigrants. Person A's neighbor is an undocumented immigrant.

Person A: *My friend said that my neighbor is an illegal.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their undocumented immigration status.

Options: [Agree, Disagree]

4.5. Familiar insults

4.5.1.

Background: 'Piece of shit' is a derogatory term that can often be used to refer to certain people.

Person A is talking to Person B.

Person A: *My friend said that my neighbor is a piece of shit.*

Evaluate this statement:

Person A is committed to a belief that it is socially-acceptable to call people 'pieces of shit.'

Options: [Agree, Disagree]

4.5.2.

Background: 'Fucker' is a derogatory term that frequently refers to people.

Person A is talking to Person B.

Person A: *My friend said that my neighbor is a fucker.*

Evaluate this statement:

Person A is committed to a belief that it is socially-acceptable to call people 'fucker.'

Options: [Agree, Disagree]

4.5.3.

Background: 'Douchebag' is a derogatory term that frequently refers to people.

Person A is talking to Person B.

Person A: *My friend said that my neighbor is a douchebag.*

Evaluate this statement:

Person A is committed to a belief that it is socially-acceptable to call people 'douchebag.'

Options: [Agree, Disagree]

4.5.4.

Background: 'Bastard' is a derogatory term that frequently refers to people.

Person A is talking to Person B.

Person A: *My friend said that my neighbor is a bastard.*

Evaluate this statement:

Person A is committed to a belief that it is socially-acceptable to call people 'bastard.'

Options: [Agree, Disagree]

4.6. Invented insults

4.6.1.

Background: 'Nerf herder' is a derogatory term, used in the Star Wars universe, that frequently refers to people who herd nerfs, a type of animal.

Person A and their friend are not nerf herders. Person A's neighbor is a nerf herder.

Person A: *My friend said that my neighbor is a nerf herder.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their job as nerf herders.

Options: [Agree, Disagree]

4.6.2.

Background: 'Dung eater' is a derogatory term, used in The Ant Bully movie, that frequently refers to people who transform into dung beetles.

Person A is talking to Person B.

Person A: *My friend said that my neighbor is a dung eater.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because they transform into insects.

Options: [Agree, Disagree]

4.6.3.

Background: 'Bambi killer' is a derogatory term that frequently refers to deer hunters.

Person A and their friend are not deer hunters. Person A's neighbor is a deer hunter.

Person A: *My friend said that my neighbor is a Bambi killer.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because they hunt deer.

Options: [Agree, Disagree]

4.6.4.

Background: 'Alienist' is a derogatory term that frequently refers to people who believe in aliens.

Person A and their friend are not alienists. Person A's neighbor is an alienist.

Person A: *My friend said that my neighbor is an alienist.*

Evaluate this statement:

Person A is committed to a belief that certain people are despicable because of their beliefs in aliens.

Options: [Agree, Disagree]

## Appendix B: Training stimuli in Experiment 1

### 1. Training item 1

Background: 'Brunette' is a term that describes someone who has brown hair.

Person A is at the hair stylist. The hair stylist is taking notes.

Person A: *I love my brown hair! I want it to be shorter, though.*

Evaluate this statement:

Person A is a brunette.

Correct answer: [AGREE]

### 2. Training item 2

Background: 'Cinephile' is a term that describes someone who loves movies.

Person A is on the phone with a friend. The friend is listening.

Person A: *I don't want to go see a movie! Movies are so boring.*

Evaluate this statement:

Person A is a cinephile.

Correct answer: [DISAGREE]

### 3. Training item 3

Background: 'Vegan' is a term that describes someone who does not eat meat or dairy.

Person A is reading a recipe book with a friend. The friend is listening.

Person A: *I want to make this pasta recipe! It has bacon and cheddar cheese - I love bacon!*

Evaluate this statement:

Person A is a vegan.

Correct answer: [DISAGREE]

## Appendix C: Optional questions in Experiment 1

### 1. Demographic questions

#### 1.1. Religion

What is your religion?

Options: [Agnostic, Atheist, Buddhist, Christian, Hindu, Jewish, Muslim, Other (please indicate)]

#### 1.2. LGBT+

Do you consider yourself to be LGBT+ and/or to be part of the LGBT+ community?

Options: [Yes, No]

### 2. Target-group questions

#### 2.1. Gender/sex(uality) slurs

##### 2.1.1.

In your opinion, can someone who is not a woman be called a *bitch*?

Options: [Yes, No, No opinion]

##### 2.1.2.

In your opinion, can someone who is not a lesbian (homosexual) woman be called a *dyke*?

Options: [Yes, No, No opinion]

##### 2.1.3.

In your opinion, can someone who is not a gay (homosexual) man be called a *faggot*?

Options: [Yes, No, No opinion]

##### 2.1.4.

In your opinion, can someone who is not a woman assumed to be sexually promiscuous be called a *slut*?

Options: [Yes, No, No opinion]

#### 2.2. Racial/ethnic slurs

##### 2.2.1.

In your opinion, can someone who is not German be called a *boche*?

Options: [Yes, No, No opinion]

##### 2.2.2.

In your opinion, can someone who is not South Asian be called a *curry muncher*?

Options: [Yes, No, No opinion]

##### 2.2.3.

In your opinion, can someone who is not Caucasian be called a *honky*?

Options: [Yes, No, No opinion]

##### 2.2.4.

In your opinion, can someone who is not of African descent be called a *nigger*?

Options: [Yes, No, No opinion]

#### 2.3. Religious slurs

##### 2.3.1.

In your opinion, can someone who is not Jewish be called a *kike*?

Options: [Yes, No, No opinion]

**2.3.2.**

In your opinion, can someone who is not Catholic be called a *papist*?

Options: [Yes, No, No opinion]

**2.3.3.**

In your opinion, can someone who is not Protestant Christian be called a *proddie*?

Options: [Yes, No, No opinion]

**2.3.4.**

In your opinion, can someone who does not wear turbans for religious reasons be called a *towelhead*?

Options: [Yes, No, No opinion]

**3. Outgroup-inappropriateness questions**

**3.1. Gender/sex(uality) slurs**

**3.1.1.**

Given a speaker who is not a woman, if the speaker called a woman a *bitch*, how inappropriate would you find this?

Options: [Extremely inappropriate, Very inappropriate, Moderately inappropriate, Slightly inappropriate, Not inappropriate at all]

**3.1.2.**

Given a speaker who is not a lesbian (homosexual) woman, if the speaker called a lesbian woman a *dyke*, how inappropriate would you find this?

Options: [Extremely inappropriate, Very inappropriate, Moderately inappropriate, Slightly inappropriate, Not inappropriate at all]

**3.1.3.**

Given a speaker who is not a gay (homosexual) man, if the speaker called a gay man a *faggot*, how inappropriate would you find this?

Options: [Extremely inappropriate, Very inappropriate, Moderately inappropriate, Slightly inappropriate, Not inappropriate at all]

**3.1.4.**

Given a speaker who is not a woman, if the speaker called a woman assumed to be sexually promiscuous a *slut*, how inappropriate would you find this?

Options: [Extremely inappropriate, Very inappropriate, Moderately inappropriate, Slightly inappropriate, Not inappropriate at all]

**3.2. Racial/ethnic slurs**

**3.2.1.**

Given a speaker who is not German, if the speaker called a German a *boche*, how inappropriate would you find this?

Options: [Extremely inappropriate, Very inappropriate, Moderately inappropriate, Slightly inappropriate, Not inappropriate at all]

**3.2.2.**

Given a speaker who is not South Asian, if the speaker called a South Asian a *curry muncher*, how inappropriate would you find this?

Options: [Extremely inappropriate, Very inappropriate, Moderately inappropriate, Slightly inappropriate, Not inappropriate at all]

**3.2.3.**

Given a speaker who is not Caucasian, if the speaker called a Caucasian person a *honky*, how inappropriate would you find this?

Options: [Extremely inappropriate, Very inappropriate, Moderately inappropriate, Slightly inappropriate, Not inappropriate at all]

### 3.2.4.

Given a speaker who is not of African descent, if the speaker called a person of African descent a *nigger*, how inappropriate would you find this?

Options: [Extremely inappropriate, Very inappropriate, Moderately inappropriate, Slightly inappropriate, Not inappropriate at all]

## 3.3. Religious slurs

### 3.3.1.

Given a speaker who is not Jewish, if the speaker called a Jew a *kike*, how inappropriate would you find this?

Options: [Extremely inappropriate, Very inappropriate, Moderately inappropriate, Slightly inappropriate, Not inappropriate at all]

### 3.3.2.

Given a speaker who is not Catholic, if the speaker called a Catholic a *papist*, how inappropriate would you find this?

Options: [Extremely inappropriate, Very inappropriate, Moderately inappropriate, Slightly inappropriate, Not inappropriate at all]

### 3.3.3.

Given a speaker who is not Protestant Christian, if the speaker called a Protestant Christian a *proddie*, how inappropriate would you find this?

Options: [Extremely inappropriate, Very inappropriate, Moderately inappropriate, Slightly inappropriate, Not inappropriate at all]

### 3.3.4.

Given a speaker who does not wear turbans for religious reasons, if the speaker called a person who does wear turbans for religious reasons a *towelhead*, how inappropriate would you find this?

Options: [Extremely inappropriate, Very inappropriate, Moderately inappropriate, Slightly inappropriate, Not inappropriate at all]

## 3.4. Familiar insults

### 3.4.1.

Given a speaker, if the speaker called a person a *bastard*, how inappropriate would you find this?

Options: [Extremely inappropriate, Very inappropriate, Moderately inappropriate, Slightly inappropriate, Not inappropriate at all]

### 3.4.2.

Given a speaker, if the speaker called a person a *douchebag*, how inappropriate would you find this?

Options: [Extremely inappropriate, Very inappropriate, Moderately inappropriate, Slightly inappropriate, Not inappropriate at all]

### 3.4.3.

Given a speaker, if the speaker called a person a *fucker*, how inappropriate would you find this?

Options: [Extremely inappropriate, Very inappropriate, Moderately inappropriate, Slightly inappropriate, Not inappropriate at all]

### 3.4.4.

Given a speaker, if the speaker called a person a *piece of shit*, how inappropriate would you find this?

Options: [Extremely inappropriate, Very inappropriate, Moderately inappropriate, Slightly inappropriate, Not inappropriate at all]

**Appendix D: Experimental stimuli in Experiment 2**

## 1. Propositional negation

## 1.1. Presupposition

## 1.1.1. Possessive

## 1.1.1.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *It is not true that my hairdresser's parrot is talkative. What is true is that my hairdresser's raven is talkative.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser has a parrot.

Options: [Agree, Disagree]

## 1.1.1.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *It is not true that my hairdresser's daughter is tall. What is true is that my hairdresser's son is tall.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser has a daughter.

Options: [Agree, Disagree]

## 1.1.2. 'Again'

## 1.1.2.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My hairdresser didn't eat chocolate for lunch again. My hairdresser has never eaten chocolate for lunch before.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser ate chocolate for lunch before.

Options: [Agree, Disagree]

## 1.1.2.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My hairdresser didn't drink hot chocolate again. My hairdresser has never drunk hot chocolate before.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser drank hot chocolate before.

Options: [Agree, Disagree]

## 1.1.3. 'Stop'

## 1.1.3.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My hairdresser didn't stop eating white chocolate. My hairdresser has never eaten white chocolate before.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser once ate white chocolate.

Options: [Agree, Disagree]

## 1.1.3.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My hairdresser didn't stop adding cayenne to their chocolate. My hairdresser has never added cayenne to their chocolate before.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser once added cayenne to their chocolate.

Options: [Agree, Disagree]

## 1.1.4. 'Manage'

## 1.1.4.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My hairdresser didn't manage to make their own chocolate from scratch. My hairdresser has been making chocolate from scratch since childhood, they could do it with their eyes closed.*

Evaluate this statement:

Person A is committed to a belief that it was difficult for their hairdresser to make their own chocolate from scratch.

Options: [Agree, Disagree]

## 1.1.4.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My hairdresser didn't manage to eat a whole bag of chocolates in one sitting. My hairdresser does that every day.*

Evaluate this statement:

Person A is committed to a belief that it was difficult for their hairdresser to eat a whole bag of chocolates in one sitting.

Options: [Agree, Disagree]

## 1.2. Nominal appositive

## 1.2.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *It is not true that my hairdresser, a chocolate-maker by training, only reads books if they're about chocolate. What is true is that my hairdresser, an untaught chocolate-maker, only reads books if they're about chocolate.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser is a chocolate-maker by training.

Options: [Agree, Disagree]

## 1.2.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *It is not true that my hairdresser, a motorcycle rider, usually rides to the candy store after work. What is true is that my hairdresser, a public transport advocate who does not own any mode of transportation, usually rides to the candy store after work.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser is a motorcycle rider.

Options: [Agree, Disagree]

## 1.2.3.

Person A is talking to Person B about Person A's hairdresser.

Person A: *It is not true that my hairdresser, a stress-eater, always carries a chocolate bar for emergencies. What is true is that my hairdresser, a calm and rational person, always carries a chocolate bar for emergencies.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser is a stress-eater.

Options: [Agree, Disagree]

1.2.4.

Person A is talking to Person B about Person A's hairdresser.

Person A: *It is not true that my hairdresser, a chocolate thief, must never find out where I hide my chocolate. What is true is that my hairdresser, a constant borrower of chocolate, must never find out where I hide my chocolate.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser is a chocolate thief.

Options: [Agree, Disagree]

1.3. Full appositive relative clause

1.3.1. Front of statement

1.3.1.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *It is not true that my hairdresser, who has a sweet tooth, hates salty potato chips. What is true is that my hairdresser, who never eats anything with sugar in it, hates salty potato chips.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser has a sweet tooth.

Options: [Agree, Disagree]

1.3.1.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *It is not true that my hairdresser, who owns a chocolate-scented candle, always carries matches. What is true is that my hairdresser, who can't own any candles because of respiratory illness, always carries matches.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser owns a chocolate-scented candle.

Options: [Agree, Disagree]

1.3.2. End of statement

1.3.2.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *It is not true that my hairdresser has a truck, which is always filled with boxes of stolen chocolate. What is true is that my hairdresser has a truck, which is filled with overdue library books.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser's truck is filled with boxes of stolen chocolate.

Options: [Agree, Disagree]

1.3.2.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *It is not true that my hairdresser has a sister, who sends French chocolates to all her relatives. What is true is that my hairdresser has a sister, who sends Mexican rosewater chocolates to her favorite relatives.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser's sister sends French chocolates to all her relatives.

Options: [Agree, Disagree]

2. Metalinguistic negation

2.1. Presupposition

2.1.1. Possessive

2.1.1.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My hairdresser's 'daughter' is not tall. My hairdresser's female heir and successor is tall.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser has a daughter.

Options: [Agree, Disagree]

2.1.1.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My hairdresser's 'parrot' is not talkative. My hairdresser's majestic tropical bird is talkative.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser has a parrot.

Options: [Agree, Disagree]

2.1.2. 'Again'

2.1.2.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My hairdresser didn't eat chocolate for lunch 'again'. My hairdresser ate chocolate for lunch the thirtieth time this month.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser ate chocolate for lunch before.

Options: [Agree, Disagree]

2.1.2.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My hairdresser has not drunk hot chocolate 'again'. My hairdresser has drunk hot chocolate for the 360th time this year.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser drank hot chocolate before.

Options: [Agree, Disagree]

2.1.3. 'Stop'

2.1.3.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My hairdresser didn't 'stop' adding cayenne to their chocolate. My hairdresser recently joined a cult that hates cayenne and tells the followers they will go to hell if they eat it.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser once added cayenne to their chocolate.

Options: [Agree, Disagree]

2.1.3.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My hairdresser didn't 'stop' eating white chocolate. My hairdresser recently had an*

*allergic reaction to white chocolate and might die if they eat it.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser once ate white chocolate.

Options: [Agree, Disagree]

2.1.4. 'Manage'

2.1.4.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My hairdresser didn't 'manage' to make their own chocolate from scratch. My hairdresser nearly blew up their house trying to do it.*

Evaluate this statement:

Person A is committed to a belief that it was difficult for their hairdresser to make their own chocolate from scratch.

Options: [Agree, Disagree]

2.1.4.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My hairdresser didn't 'manage' to eat a whole 3-pound bag of chocolates in one sitting. My hairdresser struggled and was nearly sick halfway through.*

Evaluate this statement:

Person A is committed to a belief that it was difficult for their hairdresser to eat a whole 3-pound bag of chocolates in one sitting.

Options: [Agree, Disagree]

2.2. Nominal appositive

2.2.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *It is not true that my hairdresser, a 'chocolate thief', must never find out where I hide my chocolate. What is true is that my hairdresser, a compulsive and chronic stealer of chocolate, must never find out where I hide my chocolate.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser is a chocolate thief.

Options: [Agree, Disagree]

2.2.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *It is not true that my hairdresser, a 'chocolate-maker by training', only reads books if they're about chocolate. What is true is that my hairdresser, a former honors student at the best chocolate school in the world, only reads books if they're about chocolate.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser is a chocolate-maker by training.

Options: [Agree, Disagree]

2.2.3.

Person A is talking to Person B about Person A's hairdresser.

Person A: *It is not true that my hairdresser, a 'motorcycle rider', usually drives to the candy store after work. What is true is that my hairdresser, a motorcycle fanatic who owns twenty vintage motorcycles, usually drives to the candy store after work.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser is a motorcycle rider.

Options: [Agree, Disagree]

2.2.4.

Person A is talking to Person B about Person A's hairdresser.

Person A: *It is not true that my hairdresser, a 'stress-eater', always carries a chocolate bar for emergencies. What is true is that my hairdresser, a clinically-diagnosed anxious person with ten prescriptions for anxiety medicine, always carries a chocolate bar for emergencies.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser is a stress-eater.

Options: [Agree, Disagree]

2.3. Full appositive relative clause

2.3.1. Front of statement

2.3.1.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *It is not true that my hairdresser, who 'owns a chocolate-scented candle', always carries matches. What is true is that my hairdresser, who uses their guest bedroom to make chocolate-scented candles on a near-industrial scale, always carries matches.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser owns a chocolate-scented candle.

Options: [Agree, Disagree]

2.3.1.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *It is not true that my hairdresser, who 'has a sweet tooth', hates salty potato chips. What is true is that my hairdresser, who only ever eats cakes or foods that are at least 60% sugar, hates salty potato chips.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser has a sweet tooth.

Options: [Agree, Disagree]

2.3.2. End of statement

2.3.2.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *It is not true that my hairdresser has a truck, which is 'always filled with boxes of stolen chocolate'. What is true is that my hairdresser has a truck, which is filled with all the boxes of chocolate that my hairdresser stole over their decade-long serial chocolate-stealing career.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser's truck is filled with boxes of stolen chocolate.

Options: [Agree, Disagree]

2.3.2.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *It is not true that my hairdresser has a sister, who 'sends French chocolates to all her relatives'. What is true is that my hairdresser has a sister, who sends an individual two-pound box of French chocolates to each of her relatives twice a year.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser's sister sends French chocolates to all her relatives.

Options: [Agree, Disagree]

3. Factive verb

3.1. Presupposition

3.1.1. Possessive

3.1.1.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend knows that my hairdresser's daughter is tall.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser has a daughter.

Options: [Agree, Disagree]

3.1.1.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend knows that my hairdresser's parrot is talkative.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser has a parrot.

Options: [Agree, Disagree]

3.1.2. 'Again'

3.1.2.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend knows that my hairdresser drank hot chocolate again.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser drank hot chocolate before.

Options: [Agree, Disagree]

3.1.2.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend knows that my hairdresser ate chocolate for lunch again.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser ate chocolate for lunch before.

Options: [Agree, Disagree]

3.1.3. 'Stop'

3.1.3.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend knows that my hairdresser stopped adding cayenne to their chocolate.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser once added cayenne to their chocolate.

Options: [Agree, Disagree]

3.1.3.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend knows that my hairdresser stopped eating white chocolate.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser once ate white chocolate.

Options: [Agree, Disagree]

3.1.4. 'Manage'

3.1.4.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend knows that my hairdresser managed to eat a whole bag of chocolates in one sitting.*

Evaluate this statement:

Person A is committed to a belief that it was difficult for their hairdresser to eat a whole bag of chocolates in one sitting.

Options: [Agree, Disagree]

3.1.4.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend knows that my hairdresser managed to make their own chocolate from scratch.*

Evaluate this statement:

Person A is committed to a belief that it was difficult for their hairdresser to make their own chocolate from scratch.

Options: [Agree, Disagree]

3.2. Nominal appositive

3.2.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend knows that my hairdresser, a stress-eater, always carries a chocolate bar for emergencies.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser is a stress-eater.

Options: [Agree, Disagree]

3.2.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend knows that my hairdresser, a chocolate thief, must never find out where I hide my chocolate.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser is a chocolate thief.

Options: [Agree, Disagree]

3.2.3.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend knows that my hairdresser, a chocolate-maker by training, only reads books if they're about chocolate.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser is a chocolate-maker by training.

Options: [Agree, Disagree]

3.2.4.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend knows that my hairdresser, a motorcycle rider, usually drives to the candy store after work.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser is a motorcycle rider.

Options: [Agree, Disagree]

3.3. Full appositive relative clause

3.3.1. Front of statement

## 3.3.1.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend knows that my hairdresser, who owns a chocolate-scented candle, always carries matches.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser owns a chocolate-scented candle.

Options: [Agree, Disagree]

## 3.3.1.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend knows that my hairdresser, who has a sweet tooth, hates salty potato chips.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser has a sweet tooth.

Options: [Agree, Disagree]

## 3.3.2. End of statement

## 3.3.2.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend knows that my hairdresser has a sister, who sends French chocolates to all her relatives.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser's sister sends French chocolates to all her relatives.

Options: [Agree, Disagree]

## 3.3.2.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend knows that my hairdresser has a truck, which is always filled with boxes of stolen chocolate.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser's truck is filled with boxes of stolen chocolate.

Options: [Agree, Disagree]

## 4. Verb of saying

## 4.1. Presupposition

## 4.1.1. Possessive

## 4.1.1.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend said that my hairdresser's daughter is tall.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser has a daughter.

Options: [Agree, Disagree]

## 4.1.1.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend said that my hairdresser's parrot is talkative.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser has a parrot.

Options: [Agree, Disagree]

## 4.1.2. 'Again'

## 4.1.2.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend said that my hairdresser ate chocolate for lunch again.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser ate chocolate for lunch before.

Options: [Agree, Disagree]

## 4.1.2.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend said that my hairdresser drank hot chocolate again.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser drank hot chocolate before.

Options: [Agree, Disagree]

## 4.1.3. 'Stop'

## 4.1.3.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend said that my hairdresser stopped adding cayenne to their chocolate.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser once added cayenne to their chocolate.

Options: [Agree, Disagree]

## 4.1.3.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend said that my hairdresser stopped eating white chocolate.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser once ate white chocolate.

Options: [Agree, Disagree]

## 4.1.4. 'Manage'

## 4.1.4.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend said that my hairdresser managed to make their own chocolate from scratch.*

Evaluate this statement:

Person A is committed to a belief that it was difficult for their hairdresser to make their own chocolate from scratch.

Options: [Agree, Disagree]

## 4.1.4.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend said that my hairdresser managed to eat a whole bag of chocolates in one sitting.*

Evaluate this statement:

Person A is committed to a belief that it was difficult for their hairdresser to eat a whole bag of chocolates in one sitting.

Options: [Agree, Disagree]

## 4.2. Nominal appositive

## 4.2.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend said that my hairdresser, a motorcycle rider, usually drives to the candy*

*store after work.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser is a motorcycle rider.

Options: [Agree, Disagree]

4.2.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend said that my hairdresser, a stress-eater, always carries a chocolate bar for emergencies.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser is a stress-eater.

Options: [Agree, Disagree]

4.2.3.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend said that my hairdresser, a chocolate thief, must never find out where I hide my chocolate.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser is a chocolate thief.

Options: [Agree, Disagree]

4.2.4.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend said that my hairdresser, a chocolate-maker by training, only reads books if they're about chocolate.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser is a chocolate-maker by training.

Options: [Agree, Disagree]

4.3. Full appositive relative clause

4.3.1. Front of statement

4.3.1.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend said that my hairdresser, who owns a chocolate-scented candle, always carries matches.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser owns a chocolate-scented candle.

Options: [Agree, Disagree]

4.3.1.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend said that my hairdresser, who has a sweet tooth, hates salty potato chips.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser has a sweet tooth.

Options: [Agree, Disagree]

4.3.2. End of statement

4.3.2.1.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend said that my hairdresser has a truck, which is always filled with boxes of stolen chocolate.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser's truck is filled with boxes of stolen chocolate.

Options: [Agree, Disagree]

4.3.2.2.

Person A is talking to Person B about Person A's hairdresser.

Person A: *My friend said that my hairdresser has a sister, who sends French chocolates to all her relatives.*

Evaluate this statement:

Person A is committed to a belief that their hairdresser's sister sends French chocolates to all her relatives.

Options: [Agree, Disagree]

**Appendix E: Training stimuli in Experiment 2****1. Training item 1**

Background: 'Anglophile' is a term that describes someone who loves England.

Person A is in the classroom. Their friend is listening.

Person A: *I love England! I want to live there when I graduate.*

Evaluate this statement:

Person A is an Anglophile.

Correct answer: [AGREE]

**2. Training item 2**

Background: 'Teetotaler' is a term that describes someone who doesn't drink alcohol.

Person A is on the phone with a friend. The friend is listening.

Person A: *I am at a bar! Come join me. I am drinking red wine.*

Evaluate this statement:

Person A is a teetotaler.

Correct answer: [DISAGREE]

**3. Training item 3**

Background: 'Vegetarian' is a term that describes someone who does not eat meat.

Person A is planning to host a dinner. Their friend is looking at recipe books with them.

Person A: *I want to make this pizza recipe! It has beef and chicken strips, I love those!*

Evaluate this statement:

Person A is a vegetarian.

Correct answer: [DISAGREE]

### Appendix F: Experimental stimuli in Experiment 3

#### 1. Gender/sex(uality) slurs

##### 1.1.

Background: 'Bitch' is a derogatory term that frequently refers to women.

Person A is talking to Person B about Person A's coworker.

Person A: *That bitch mowed her lawn yesterday.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not appropriate. She's a woman., That's not appropriate. She's not a bitch., That's not appropriate. She's not a bitch, she's a woman., Hey, wait a minute. She's a woman., Hey, wait a minute. She's not a bitch., Hey, wait a minute. She's not a bitch, she's a woman.]

##### 1.2.

Background: 'Dyke' is a derogatory term that frequently refers to lesbian (homosexual) women.

Person A is talking to Person B about Person A's coworker.

Person A: *That dyke rebuilt her car engine from scratch.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not appropriate. She's a lesbian., That's not appropriate. She's not a dyke., That's not appropriate. She's not a dyke, she's a lesbian., Hey, wait a minute. She's a lesbian., Hey, wait a minute. She's not a dyke., Hey, wait a minute. She's not a dyke, she's a lesbian.]

##### 1.3.

Background: 'Faggot' is a derogatory term that frequently refers to gay (homosexual) men.

Person A is talking to Person B about Person A's coworker.

Person A: *That faggot wrote another novel.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not appropriate. He's gay., That's not appropriate. He's not a faggot., That's not appropriate. He's not a faggot, he's gay., Hey, wait a minute. He's gay., Hey, wait a minute. He's not a faggot., Hey, wait a minute. He's not a faggot, he's gay.]

##### 1.4.

Background: 'Slut' is a derogatory term that frequently refers to certain women who are assumed to be sexually promiscuous.

Person A is talking to Person B about Person A's coworker.

Person A: *That slut washed her windows.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not appropriate. She's a woman., That's not appropriate. She's not a slut., That's not appropriate. She's not a slut, she's a woman., Hey, wait a minute. She's a woman., Hey, wait a minute. She's not a slut., Hey, wait a minute. She's not a slut, she's a woman.]

#### 2. Racial/ethnic slurs

##### 2.1.

Background: 'Boche' is a derogatory term that frequently refers to Germans.

Person A is talking to Person B about Person A's coworker.

Person A: *That boche put up new curtains in their living room.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not appropriate. They're German., That's not appropriate. They're not a boche., That's not appropriate. They're not a boche, they're German., Hey, wait a minute. They're German., Hey, wait a minute. They're not a boche., Hey, wait a minute. They're not a boche, they're German.]

### 2.2.

Background: 'Curry muncher' is a derogatory term that frequently refers to South Asians.

Person A is talking to Person B about Person A's coworker.

Person A: *That curry muncher mixed a red into their laundry so that all their whites turned pink.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not appropriate. They're South Asian., That's not appropriate. They're not a curry muncher., That's not appropriate. They're not a curry muncher, they're South Asian., Hey, wait a minute. They're South Asian., Hey, wait a minute. They're not a curry muncher., Hey, wait a minute. They're not a curry muncher, they're South Asian.]

### 2.3.

Background: 'Honky' is a derogatory term that frequently refers to Caucasian people.

Person A is talking to Person B about Person A's coworker.

Person A: *That honky had a coughing fit when they dusted the bookshelves.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not appropriate. They're white., That's not appropriate. They're not a honky., That's not appropriate. They're not a honky, they're white., Hey, wait a minute. They're white., Hey, wait a minute. They're not a honky., Hey, wait a minute. They're not a honky, they're white.]

### 2.4.

Background: 'Nigger' is a derogatory term that frequently refers to people of African descent.

Person A is talking to Person B about Person A's coworker.

Person A: *That nigger asked me how to fold fitted sheets.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not appropriate. They're of African descent., That's not appropriate. They're not a nigger., That's not appropriate. They're not a nigger, they're of African descent., Hey, wait a minute. They're of African descent., Hey, wait a minute. They're not a nigger., Hey, wait a minute. They're not a nigger, they're of African descent.]

## 3. Religious slurs

### 3.1.

Background: 'Kike' is a derogatory term that frequently refers to Jews.

Person A is talking to Person B about Person A's coworker.

Person A: *That kike plumped the couch pillows.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not appropriate. They're Jewish., That's not appropriate. They're not a kike., That's not appropriate. They're not a kike, they're Jewish., Hey,

wait a minute. They're Jewish., Hey, wait a minute. They're not a kike., Hey, wait a minute. They're not a kike, they're Jewish.]

## 3.2.

Background: 'Papist' is a derogatory term that frequently refers to Catholics.

Person A is talking to Person B about Person A's coworker.

Person A: *That papist sewed up a hole in the knee of their jeans.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not appropriate. They're Catholic., That's not appropriate. They're not a papist., That's not appropriate. They're not a papist, they're Catholic., Hey, wait a minute. They're Catholic., Hey, wait a minute. They're not a papist., Hey, wait a minute. They're not a papist, they're Catholic.]

## 3.3.

Background: 'Proddie' is a derogatory term that frequently refers to Protestant Christians.

Person A is talking to Person B about Person A's coworker.

Person A: *That proddie planted carrots in their garden.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not appropriate. They're Protestant Christian., That's not appropriate. They're not a proddie., That's not appropriate. They're not a proddie, they're Protestant Christian., Hey, wait a minute. They're Protestant Christian., Hey, wait a minute. They're not a proddie., Hey, wait a minute. They're not a proddie, they're Protestant Christian.]

## 3.4.

Background: 'Towelhead' is a derogatory term that frequently refers to people who wear turbans for religious reasons.

Person A is talking to Person B about Person A's coworker.

Person A: *That towelhead pruned their apple tree.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not appropriate. They wear turbans for religious reasons., That's not appropriate. They're not a towelhead., That's not appropriate. They're not a towelhead, they wear turbans for religious reasons., Hey, wait a minute. They wear turbans for religious reasons., Hey, wait a minute. They're not a towelhead., Hey, wait a minute. They're not a towelhead, they wear turbans for religious reasons.]

## 4. Familiar insults

## 4.1.

Background: 'Bastard' is a derogatory term that frequently refers to people.

Person A is talking to Person B about Person A's coworker.

Person A: *That bastard used the smelliest fertilizer on their prize shrubs.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not appropriate. They're a moron., That's not appropriate. They're not a bastard., That's not appropriate. They're not a bastard, they're a moron., Hey, wait a minute. They're a moron., Hey, wait a minute. They're not a bastard., Hey, wait a minute. They're not a bastard, they're a moron.]

## 4.2.

Background: 'Douchebag' is a derogatory term that frequently refers to people.

Person A is talking to Person B about Person A's coworker.

Person A: *That douchebag bought a water feature in their garden that attracts mosquitoes.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not appropriate. They're a jerk., That's not appropriate. They're not a douchebag., That's not appropriate. They're not a douchebag, they're a jerk., Hey, wait a minute. They're a jerk., Hey, wait a minute. They're not a douchebag., Hey, wait a minute. They're not a douchebag, they're a jerk.]

4.3.

Background: 'Fucker' is a derogatory term that frequently refers to people.

Person A is talking to Person B about Person A's coworker.

Person A: *That fucker had an extremely loud holiday party.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not appropriate. They're a fool., That's not appropriate. They're not a fucker., That's not appropriate. They're not a fucker, they're a fool., Hey, wait a minute. They're a fool., Hey, wait a minute. They're not a fucker., Hey, wait a minute. They're not a fucker, they're a fool.]

4.4.

Background: 'Piece of shit' is a derogatory term that frequently refers to people.

Person A is talking to Person B about Person A's coworker.

Person A: *That piece of shit didn't say happy birthday to me on my birthday.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not appropriate. They're an idiot., That's not appropriate. They're not a piece of shit., That's not appropriate. They're not a piece of shit, they're an idiot., Hey, wait a minute. They're an idiot., Hey, wait a minute. They're not a piece of shit., Hey, wait a minute. They're not a piece of shit, they're an idiot.]

### Appendix G: Training stimuli in Experiment 3

#### 1. Training item 1

Background: 'Francophile' is a term that describes someone who loves France.

Person A is talking to Person B about Person A's coworker.

Person A: *My coworker loves all French things. My coworker loves speaking French the most, loves wearing a French flag pin slightly less, and loves reading French authors least. My coworker dislikes speaking English the most, dislikes wearing an English flag pin slightly less, and dislikes reading English authors the least.*

What does Person A's coworker like and dislike, in rank order?

Correct answer: [Person A's coworker likes: (1) Speaking French (2) Wearing a French flag pin (3) Reading French authors; Person A's coworker dislikes: (1) Speaking English (2) Wearing an English flag pin (3) Reading English authors]

#### 2. Training item 2

Background: 'Prohibitionist' is a term that describes someone who wants to ban all alcohol.

Person A is talking to Person B about Person A's coworker.

Person A: *My coworker thinks no one should drink alcohol. My coworker thinks that alcohol first leads to alcoholism, then to drunk and disorderly behavior, then to car accidents, and then to bad health later in life. My coworker thinks that not drinking alcohol leads first to inner happiness and then to a good work ethic.*

What does Person A's coworker think about alcohol, in rank order?

Correct answer: [Person A's coworker thinks alcoholism leads to: (1) Alcoholism (2) Drunk and disorderly behavior (3) Car accidents (4) Bad health; Person A's coworker thinks not drinking alcohol leads to: (1) Inner happiness (2) Good work ethic]

#### 3. Training item 3

Background: 'Pescatarian' is a term that describes someone who is a vegetarian who eats fish, but who eats no other meat.

Person A is talking to Person B about Person A's coworker.

Person A: *My coworker's favorite food is salmon sushi. Their second favorite is raw oysters, and their third favorite is salad. My coworker hates beef stew the most. They dislike fried chicken less, and dislike boiled turkey the least.*

What does is Person A's coworker likely to eat, in rank order?

Correct answer: [Person A's coworker likes: (1) Salmon sushi (2) Raw oyster (3) Salad; Person A's coworker dislikes: (1) Beef stew (2) Fried chicken (3) Boiled turkey]

**Appendix H: Experimental stimuli in Experiment 4**

## 1. Presupposition

## 1.1. Possessive

## 1.1.1.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt fed my dog a bacon treat.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. You have a cat., That's not true. You don't have a dog., That's not true. You don't have a dog, you have a cat., Hey, wait a minute.

You have a cat., Hey, wait a minute. You don't have a dog., Hey, wait a minute. You don't have a dog, you have a cat.]

## 1.1.2.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt watered the plants in my greenhouse.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. You have a boathouse., That's not true. You don't have a greenhouse., That's not true. You don't have a greenhouse, you have a boathouse., Hey, wait a minute. You have a boathouse., Hey, wait a minute. You don't have a greenhouse., Hey, wait a minute. You don't have a greenhouse, you have a boathouse.]

## 1.2. 'Again'

## 1.2.1.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt ate all the chocolates in the cupboard again.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. This is the first time that your aunt ate all the chocolates., That's not true. Your aunt never ate all the chocolates before., That's not true. Your aunt never ate all the chocolates before, this is the first time she's done it., Hey, wait a minute. This is the first time that your aunt ate all the chocolates., Hey, wait a minute. Your aunt never ate all the chocolates before., Hey, wait a minute. Your aunt never ate all the chocolates before, this is the first time she's done it.]

## 1.2.2.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt bought the wrong kind of potatoes for the soup again.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. This is the first time that your aunt bought the wrong potatoes., That's not true. Your aunt never bought the wrong potatoes before., That's not true. Your aunt never bought the wrong potatoes before, this is the first time she's done it., Hey, wait a minute. This is the first time that your aunt bought the wrong potatoes., Hey, wait a minute. Your aunt never bought the wrong potatoes before., Hey, wait a minute. Your aunt never bought the wrong potatoes before, this is the first time she's done it.]

## 1.3. 'Stop'

## 1.3.1.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt stopped playing loud music at night.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. Your aunt is very considerate., That's not true. Your aunt never played loud music before., That's not true. Your aunt never played loud music before, she's very considerate., Hey, wait a minute. Your aunt is very considerate., Hey, wait a minute. Your aunt never played loud music before., Hey, wait a minute. Your aunt never played loud music before, she's very considerate.]

#### 1.3.2.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt stopped wearing cravats before 5pm.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. Your aunt has excellent taste., That's not true. Your aunt never wore cravats before 5pm in the past., That's not true. Your aunt never wore cravats before 5pm in the past, she have excellent taste., Hey, wait a minute. Your aunt has excellent taste., Hey, wait a minute. Your aunt never wore cravats before 5pm in the past., Hey, wait a minute. Your aunt never wore cravats before 5pm in the past, she have excellent taste.]

#### 1.4. 'Manage'

##### 1.4.1.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt managed to fix the porchlight's electrical wiring.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. Your aunt studied electrical engineering at Harvard., That's not true. It wasn't difficult for your aunt to fix the porchlight's electrical wiring., That's not true. It wasn't difficult for your aunt to fix the porchlight's electrical wiring, she studied electrical engineering at Harvard., Hey, wait a minute. Your aunt studied electrical engineering at Harvard., Hey, wait a minute. It wasn't difficult for your aunt to fix the porchlight's electrical wiring., Hey, wait a minute. It wasn't difficult for your aunt to fix the porchlight's electrical wiring, she studied electrical engineering at Harvard.]

##### 1.4.2.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt managed to organize the books in the library.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. Your aunt has a Masters degree in library sciences., That's not true. It wasn't difficult for your aunt to organize the books., That's not true. It wasn't difficult for your aunt to organize the books, she has a Masters degree in library sciences., Hey, wait a minute. Your aunt has a Masters degree in library sciences., Hey, wait a minute. It wasn't difficult for your aunt to organize the books., Hey, wait a minute. It wasn't difficult for your aunt to organize the books, she has a Masters degree in library sciences.]

#### 2. Nominal appositive

##### 2.1.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt, a physicist by training, prepared another scientific article for publication.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. Your aunt is a veterinarian by training., That's not true. Your aunt isn't a physicist by training., That's not true. Your aunt isn't a

physicist by training, she's a veterinarian by training., Hey, wait a minute. Your aunt is a veterinarian by training., Hey, wait a minute. Your aunt isn't a physicist by training., Hey, wait a minute. Your aunt isn't a physicist by training, she's a veterinarian by training.]

2.2.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt, a yoga instructor on the side, bought a new pair of leggings.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. Your aunt makes candles on the side., That's not true. Your aunt isn't a yoga instructor on the side., That's not true. Your aunt isn't a yoga instructor on the side, she makes candles., Hey, wait a minute. Your aunt makes candles on the side., Hey, wait a minute. Your aunt isn't a yoga instructor on the side., Hey, wait a minute. Your aunt isn't a yoga instructor on the side, she makes candles.]

2.3.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt, a tuba player, tried out for a jazz band.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. Your aunt plays the flute., That's not true. Your aunt isn't a tuba player., That's not true. Your aunt isn't a tuba player, she plays the flute., Hey, wait a minute. Your aunt plays the flute., Hey, wait a minute. Your aunt isn't a tuba player., Hey, wait a minute. Your aunt isn't a tuba player, she plays the flute.]

2.4.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt, a skincare enthusiast, explained the difference between lotions and creams to me.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. Your aunt only cares about makeup., That's not true. Your aunt isn't a skincare enthusiast., That's not true. Your aunt isn't a skincare enthusiast, she only cares about makeup., Hey, wait a minute. Your aunt only cares about makeup., Hey, wait a minute. Your aunt isn't a skincare enthusiast., Hey, wait a minute. Your aunt isn't a skincare enthusiast, she only cares about makeup.]

3. Full appositive relative clause

3.1. Front of statement

3.1.1.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt, who has brown hair, painted the bedroom green.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. Your aunt is blonde., That's not true. Your aunt doesn't have brown hair., That's not true. Your aunt doesn't have brown hair, she's blonde., Hey, wait a minute. Your aunt is blonde., Hey, wait a minute. Your aunt doesn't have brown hair., Hey, wait a minute. Your aunt doesn't have brown hair, she's blonde.]

3.1.2.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt, who owns a motorcycle, had the chimney professionally cleaned.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. Your aunt owns a Ferrari car., That's not true. Your aunt doesn't own a motorcycle., That's not true. Your aunt doesn't own a

motorcycle, she owns a Ferrari car., Hey, wait a minute. Your aunt owns a Ferrari car., Hey, wait a minute. Your aunt doesn't own a motorcycle., Hey, wait a minute. Your aunt doesn't own a motorcycle, she owns a Ferrari car.]

### 3.2. End of statement

#### 3.2.1.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt has two cousins, who live in a treehouse.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. Your aunt's cousins live in a mansion., That's not true. Your aunt's cousins don't live in a treehouse., That's not true. Your aunt's cousins don't live in a treehouse, they live in a mansion., Hey, wait a minute. Your aunt's cousins live in a mansion., Hey, wait a minute. Your aunt's cousins don't live in a treehouse., Hey, wait a minute. Your aunt's cousins don't live in a treehouse, they live in a mansion.]

#### 3.2.2.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt has a parakeet, who knows how to ask for a cracker.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. Your aunt's parakeet knows how to dance the tango., That's not true. Your aunt's parakeet doesn't know how to ask for a cracker., That's not true. Your aunt's parakeet doesn't know how to ask for a cracker, it knows how to dance the tango., Hey, wait a minute. Your aunt's parakeet knows how to dance the tango., Hey, wait a minute. Your aunt's parakeet doesn't know how to ask for a cracker., Hey, wait a minute. Your aunt's parakeet doesn't know how to ask for a cracker, it knows how to dance the tango.]

### 4. At-issue

#### 4.1.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt bought a telescope.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. Your aunt bought a microscope., That's not true. Your aunt didn't buy a telescope., That's not true. Your aunt didn't buy a telescope, she bought a microscope., Hey, wait a minute. Your aunt bought a microscope., Hey, wait a minute. Your aunt didn't buy a telescope., Hey, wait a minute. Your aunt didn't buy a telescope, she bought a microscope.]

#### 4.2.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt learned how to swim.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. Your aunt learned how to paraglide., That's not true. Your aunt didn't learn how to swim., That's not true. Your aunt didn't learn how to swim, she learned how to paraglide., Hey, wait a minute. Your aunt learned how to paraglide., Hey, wait a minute. Your aunt didn't learn how to swim., Hey, wait a minute. Your aunt didn't learn how to swim, she learned how to paraglide.]

#### 4.3.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt ran a marathon on Sunday.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. Your aunt did a triathlon., That's not true. Your aunt didn't run a marathon on Sunday., That's not true. Your aunt didn't run a marathon on Sunday, she did a triathlon., Hey, wait a minute. Your aunt did a triathlon., Hey, wait a minute. Your aunt didn't run a marathon on Sunday., Hey, wait a minute. Your aunt didn't run a marathon on Sunday, she did a triathlon.]

4.4.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt advertised for a roommate.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. Your aunt advertised for a housekeeper., That's not true. Your aunt didn't advertise for a roommate., That's not true. Your aunt didn't advertise for a roommate, she advertised for a housekeeper., Hey, wait a minute. Your aunt advertised for a housekeeper., Hey, wait a minute. Your aunt didn't advertise for a roommate., Hey, wait a minute. Your aunt didn't advertise for a roommate, she advertised for a housekeeper.]

4.5.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt rearranged the paintings in the stairwell.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. Your aunt dusted the piano., That's not true. Your aunt didn't rearrange the paintings., That's not true. Your aunt didn't rearrange the paintings, she dusted the piano., Hey, wait a minute. Your aunt dusted the piano., Hey, wait a minute. Your aunt didn't rearrange the paintings., Hey, wait a minute. Your aunt didn't rearrange the paintings, she dusted the piano.]

4.6.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt dusted the decorative glass bottles.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. Your aunt drank wine., That's not true. Your aunt didn't dust the bottles., That's not true. Your aunt didn't dust the bottles, she drank wine., Hey, wait a minute. Your aunt drank wine., Hey, wait a minute. Your aunt didn't dust the bottles., Hey, wait a minute. Your aunt didn't dust the bottles, she drank wine.]

4.7.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt fed the chickens out back.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. Your aunt mucked out the pigpen., That's not true. Your aunt didn't feed the chickens., That's not true. Your aunt didn't feed the chickens, she mucked out the pigpen., Hey, wait a minute. Your aunt mucked out the pigpen., Hey, wait a minute. Your aunt didn't feed the chickens., Hey, wait a minute. Your aunt didn't feed the chickens, she mucked out the pigpen.]

4.8.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt found the pair of scissors I lost.*

If you were Person B, what would you say to disagree with Person A?

Options: [I would say OR I would not say: That's not true. Your aunt chose a new chandelier., That's not true. Your aunt didn't find the scissors., That's not true. Your aunt didn't find the scissors, she chose a new chandelier., Hey, wait a minute. Your aunt chose a new chandelier., Hey, wait a minute. Your aunt didn't find the scissors., Hey, wait a minute. Your aunt didn't find the scissors, she chose a new chandelier.]

## Appendix I: Training stimuli in Experiment 4

### 1. Training item 1

Background: 'Bibliophile' is a term that describes someone who loves books.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt reads all the time. She reads the newspaper in the morning and a book at night. She hates television the most in the world, followed by computers, then video games, and then the radio.*

What does Person A's aunt like and dislike, in rank order?

Correct answer: [Person A's aunt reads: (1) Newspaper (2) Book; Person A's aunt dislikes: (1) Television (2) Computer (3) Video games (4) Radio]

### 2. Training item 2

Background: 'Blonde' is a term that describes someone who has blond hair.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt has dyed her hair multiple times. She liked being a ginger the most, with being a brunette second, and having black hair third. She disliked having green hair the most, with having blue hair second, and purple hair third.*

What hair colors does Person A's aunt like and dislike, in rank order?

Correct answer: [Person A's aunt likes: (1) Ginger (2) Brunette (3) Black; Person A's aunt dislikes: (1) Green (2) Blue (3) Purple]

### 3. Training item 3

Background: 'Fruitarian' is a term that describes someone who only eats fruit.

Person A is talking to Person B about Person A's aunt.

Person A: *My aunt loves watermelon juice more than she loves peach juice, and loves peach juice more than she loves strawberry smoothies. She hates mint tea the most, more than she hates lemon tea. She hates chamomile tea the least.*

What does Person A's aunt like and dislike to drink, in rank order?

Correct answer: [Person A's aunt likes: (1) Watermelon juice (2) Peach juice (3) Strawberry smoothie; Person A's aunt dislikes: (1) Mint tea (2) Lemon tea (3) Chamomile tea]