Report

"We" are familiar but "It" is not: Ingroup pronouns trigger feelings of familiarity [☆]

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ABSTRACT

The notion that language can shape social perception has a long history in psychology. The current work adds to this literature by investigating the relationship between ingroup-designating pronouns and perceptions of familiarity. In two experiments, participants were exposed to nonsense syllables that were primed with ingroup (e.g., we) and control (e.g., it) pronouns before perceptions of the syllables' familiarity (Experiments 1 and 2) and positivity (Experiment 2) were assessed. Because previous work has shown that ingroup pronouns are perceived positively (Perdue, Dovidio, Gurtman, & Tyler, 1990), and that positivity can trigger familiarity (e.g., Garcia-Marques, Mackie, Claypool, & Garcia-Marques, 2004; Monin, 2003), we predicted that syllables primed with ingroup-designating pronouns would be perceived as more familiar and positive than would syllables primed with control pronouns. These predictions were confirmed. Additionally, Experiment 2 provided suggestive evidence that the effect of ingroup pronouns on perceived familiarity is mediated by positivity. Implications of these results for the literatures on how language shapes intergroup biases and on how positivity triggers feelings of familiarity are discussed.

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Introduction

Intergroup biases shape and are shaped by the language we use (e.g., Krauss & Chiu, 1998). For example, individuals utilize more abstract language to describe positive ingroup and negative outgroup actions compared to negative ingroup and positive outgroup actions (Maass, Salvi, Arcuri, & Semin, 1989). Our tendency to exhibit this "linguistic intergroup bias" may, in turn, play an important role in stereotype maintenance and enhancement, as abstract language is perceived to communicate more information about the subject's stable qualities (Maass, 1999). As another example, consider how the use of derogatory language can shape outgroup perceptions. Greenberg and Pyszczynski (1985) found that those who heard a racist slur about an African–American who lost a debate rated him as less competent than those who heard a negative, but non-ethnically related, comment about him. Similarly, Simon and Greenberg (1996) found that those with strong negative attitudes toward African–Americans rated an African–American confederate less favorably if described with an eth-

nic slur versus no comment, whereas those with positive African–American attitudes were unaffected by comment type.

Even pronoun usage influences and reflects intergroup biases and processes. Generic masculine terms (e.g., he), for example, conjure male-dominated responses (e.g., MacKay & Fulkerson, 1979) and images (Wilson & Ng, 1988). Moreover, individuals "bask in the reflected glory" of their ingroup by using the term "we" more frequently to describe a successful ingroup outcome compared to an ingroup failure (Cialdini et al., 1976). And most basically, ingroup pronouns (e.g., we) are evaluated more favorably than outgroup (e.g., they) or group-irrelevant (e.g., you) pronouns (Perdue, Dovidio, Gurtman, & Tyler, 1990). This latter work shows that repeatedly pairing an ingroup pronoun with an inconsequential symbol (a nonsense syllable) can positively bias attitudes toward it, leading Perdue and colleagues (1990) to speculate that use of ingroup pronouns in everyday communication may "perpetuate and possibly transfer ingroup-related biases to evaluations of other people" (p. 482).

In the current work, we investigate whether the use of ingroup pronouns triggers another type of response that may also have intergroup consequences, namely, a sense of familiarity. We believe that ingroup pronouns might trigger feelings of familiarity because positive stimuli are perceived as familiar (e.g., Corneille, Monin, & Pleyers, 2005; Garcia-Marques, Mackie, Claypool, & Garcia-Marques, 2004; Monin, 2003; Phaf & Rotteveel, 2005). In one study illustrating this positivity-cues-familiarity effect (Garcia-Marques et al., 2004, Experiment 2), participants were initially ex-

posed to a list of neutral words and later presented with these original words intermixed with additional novel words. Each original and novel word was subliminally primed with either a smiley face icon or a circle, a technique used to imbue the target with positivity or neutrality, respectively. Participants indicated if each word was old or new. When there was an objective cue to familiarity (i.e., the word was actually old), positivity had no effect on responses. However, novel words nonconsciously primed with positivity were mistakenly reported as familiar more so than their neutrally-primed counterparts. Thus, because both classic and contemporary work (see Allport, 1954; Brewer, 1979; Brewer & Brown, 1998, for reviews) has shown that ingroup members are viewed quite positively and, more specifically, that ingroup pronouns themselves are too (Perdue et al., 1990), ingroup pronouns may be sufficiently positive to trigger feelings of familiarity. In other words, ingroup pronouns may be perceived positively which, in turn, may make subsequently-presented stimuli appear more familiar.

Our objectives, then, were to test the hypothesis that stimuli are perceived as more familiar if primed with ingroup pronouns than with control (neutral, non-group based) pronouns and to investigate whether this effect may be mediated by positivity. If obtained, these findings would meaningfully extend the work of Perdue and colleagues (1990) that showed that ingroup pronouns nonconsciously trigger feelings of positivity. Because such pronouns can affectively bias co-presented stimuli, their use may maintain or enhance intergroup biases (Perdue et al., 1990). Similarly, because familiarity itself breeds liking (e.g., Zajonc, 1968; see Bornstein, 1989, for a meta-analytic review), it is clear that if ingroup pronouns trigger feelings of familiarity that this reaction itself could also enhance or maintain intergroup biases. Moreover, if our hypothesis is confirmed, it will also meaningfully extend the work on the positivity-cues-familiarity effect, by showing that linguistic stimuli related to the ingroup are sufficiently positive to trigger feelings of familiarity. Finally, and most broadly, this finding would provide yet another example that language (in this case, pronoun usage) can influence social perception.

Experiment 1

The purpose of Experiment 1 was to garner initial evidence for our hypothesis that ingroup pronouns can trigger feelings of familiarity. We chose to use extremely brief presentations of the pronouns in this first experiment: (1) to determine whether the predicted effect is so powerful that it can occur when respondents' abilities to consciously perceive the pronouns are seriously or perhaps completely limited and (2) because doing so would minimize demand characteristics, as participants should be less able to "guess" the nature of the hypothesis with the use of such a subtle (perhaps nonconscious) experimental manipulation.

Method

Participants and design

Forty-one (23 female) PSY 111 students completed the experiment for course credit. A 2 (prime: ingroup, control) × 2 (counterbalancing list: A, B) mixed design was used, with prime manipulated within-subjects, and counterbalancing list manipulated between-subjects.

Materials

Target stimuli were 36 nonsense syllables (see "Appendix") randomly assigned to one of two lists (A vs. B, with 18 syllables each). These three-letter syllables had a consonant–vowel–consonant format to ensure they were pronounceable.

Procedure

Participants were seated approximately 18 in. in front of a computer screen in individual cubicles. They were informed that they would be completing two tasks assessing different cognitive skills, the first of which involved testing their long-term memory (which was done merely to bolster the cover story of the primary task, described below). Next, participants were told that their long-term memory would be tested by asking them to recall the capital of each US state. On a particular trial, participants were asked, "What is the capital of [state name]?" Participants were given 10 s to answer after which the screen advanced and queried them about another state. After all 50 states were presented, approximately 8 min later, participants moved to the primary "recognition" task.

To begin the "recognition" task, participants were informed that nonsense syllables had been subliminally presented to them during the capital-naming task and that their goal would be to identify which syllables, out of a subsequent list, had been previously presented. In reality, no syllables had been presented (see Claypool, Hall, Mackie, & Garcia-Marques, 2008; Monin, 2003, Experiment 4, for similar methodologies). Thus, a report that a syllable had been previously presented was assumed to tap a participant's subjective feeling of familiarity with it.

Participants first looked at a fixation point (∗), presented for 1s, which was approximately 1 cm tall in the center of the screen. After it disappeared, a pronoun prime was presented for 31 ms.[1] For half (18) of the trials, the prime was an ingroup pronoun (we, us, our), and for the other half, the prime was a neutral pronoun (it, its). Following the prime, a nonsense syllable appeared, which also served as a backward mask. Once it did so, participants indicated whether it was "old" (had been subliminally presented earlier) or "new" (had not been subliminally presented earlier) by pressing one of two keys on the keyboard (F and J, respectively). Once participants responded, the screen advanced and a new trial began. In all, participants rendered 36 decisions in response to the 18 syllables from List A and the 18 syllables from List B (which were intermixed in a different random order for each participant). Within each list, for each participant, the computer randomly determined which pronoun would be paired with the syllable. For each participant, there were equal numbers (6 each) of "we," "us" and, "our" primes and equal numbers (9 each) of "it" and "its" primes. On a between-subjects basis, we manipulated which list was primed with which type of pronoun. Thus, across all participants, a particular syllable had an equal likelihood of being primed with an ingroup and a neutral pronoun.

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[1] Two pilot studies investigated whether the prime duration used in Experiment 1 was subliminal. In the first, 11 participants were subjected to primes shown under the same parameters as in Experiment 1. Specifically, participants were shown "flashes" on the computer screen and were told that each was actually a word that they should try to identify. On each trial, participants saw a fixation point (∗) followed by a 31 ms prime. Immediately after, a nonsense syllable appeared in Times New Roman 12 pt font, as approximately 1 cm tall, which also served as a backward mask. As this syllable was onscreen, participants circled, on a response sheet, which of two words they believed had been "flashed." Each choice set contained the actual pronoun prime and a foil of equal length that contained at least one similar letter (e.g., when "we" was primed, "we" and "me" were the choices). In all, there were 10 total trials, across which each of the pronoun primes appeared twice, resulting in six ingroup pronoun (we, us, our) and four control pronoun (it, its) trials. For each participant, we summed the total of his/her correct responses (out of 10). Results indicated that participants could not identify the primed words at better than chance levels ($M = 5.64$ correct), $t(10) = 1.47$, $p = .17$. In the second pilot, nine participants were submitted to the same method just described, but instead wrote down whatever word they believed was "flashed." Of the 90 total trials across all participants, there were only five correct responses (5.5%). Because all primes were simple, high-frequency words (like "it" and "we"), some correct guesses were inevitable and likely reflect mere chance. Together, these pilot studies suggest that the priming technique used in Experiment 1 is subliminal. However, making a strong claim of subliminality from null findings is unwise. Thus, we refrain from calling our priming technique subliminal in the main text.

Once finished with the "recognition" task, participants were probed for suspicion and asked if they had seen anything other than the asterisk, target syllables, and key-mapping reminders on the screen. If they had, they then provided a description of what they saw.[2] Finally, participants provided demographic information, were debriefed, thanked, and dismissed.

Results and discussion

For each participant, we summed the number of "old" (familiar) decisions rendered. We predicted that syllables primed with ingroup pronouns would be mistakenly identified as "old" (familiar) more frequently than would neutrally-primed syllables. To investigate this hypothesis, the number of old judgments was entered into a 2 (pronoun prime: ingroup, neutral) × 2 (counterbalancing list: A, B) mixed-model ANOVA, with repeated measures on the first factor. The results confirmed our hypothesis. Nonsense syllables primed with ingroup pronouns ($M = 8.85$, $SD = 2.80$) were identified as familiar more frequently than those primed with neutral pronouns ($M = 7.77$, $SD = 2.79$), $F(1, 39) = 5.64$, $p = .02$. No other significant effects emerged, $ps > .49$.

Thus, pronouns that represent the ingroup triggered greater feelings of familiarity than did the control (non-group related) pronouns. It is important to note that this did not occur merely because the ingroup pronouns themselves are more familiar. An examination of the average word frequency for each prime type shows that the neutral primes we used are approximately 3.5 times more frequent in the language than the ingroup primes (Kučera & Francis, 1967). Thus, despite being *less frequently* used in the language, the ingroup pronouns triggered *greater* feelings of familiarity.

Experiment 2

Experiment 1 provided initial evidence for our hypothesis that ingroup pronouns can trigger feelings of familiarity. The purpose of Experiment 2 was to garner evidence that this effect may be mediated by changes in perceived positivity. Another aim of Experiment 2 was to replicate the ingroup pronoun-familiarity effect using more blatant exposures to the pronouns. As stated earlier, we believe that everyday exposure to ingroup pronouns in our language may bias us to perceive associated stimuli as more familiar. And though subtle priming techniques afford researchers some benefits, such techniques are not very ecologically valid. Therefore, we deemed it important to show that obvious, conscious exposure to ingroup pronouns could produce the same effect we observed in the first experiment.

Method

Participants and design

Forty-six (30 female) students in PSY 111 participated in exchange for partial course credit. A 2 (prime: ingroup, control) × 2 (judgment type: positivity, familiarity) mixed design was used, with prime manipulated within-subjects, and judgment type manipulated between-subjects. Judgment type was manipulated between-subjects because previous work suggests that asking participants to report both positivity and familiarity ratings can be

problematic and also because doing so may be beneficial from a measurement perspective (see below for elaboration).

Procedure

The beginning of the experiment was the same as Experiment 1, in that participants were first seated in front of a computer and completed the capital-identification task. Following this task, participants in the familiarity-rating condition were told that nonsense syllables had been subliminally shown during the capital task (which, as in Experiment 1, was not true), and that they would have to indicate how familiar subsequently-presented nonsense syllables seemed. Participants in the positivity-rating condition were simply told that we wanted them to rate how appealing they found subsequently-presented nonsense syllables. In addition, participants in both conditions were told that we were interested in how distraction would affect their judgments, so prior to each nonsense syllable presentation, a distractor word would appear. They were to ignore this distractor word and make their judgment of familiarity or positivity based on the nonsense syllable alone.

Each trial proceeded as follows. First, a distractor word appeared for 1s and then, 30 ms later, a nonsense syllable was presented. These distractor words were, in fact, the ingroup and neutral pronouns. The syllable remained on the screen until a familiarity or positivity judgment, depending on condition, was made. On each trial, participants were to answer the following question, "How familiar (appealing) do I find this letter string?" as the appropriate rating scale [1–7; not at all familiar (appealing) – very familiar (appealing)] was shown. Participants used the numbers at the top of the keyboard to respond. In all, participants completed 36 trials. For half (18) of them, the distractor word (prime) was an ingroup pronoun and for the other half (18), it was a neutral pronoun.[3] After all trials were completed, participants provided demographic information and were debriefed.

Results and discussion

Two sets of analyses were conducted. The first was done with participant as the unit of analysis. This determined if, within participants, syllables primed with ingroup pronouns were perceived as more familiar and as more appealing than those primed with neutral pronouns. If obtained, these findings would replicate the results of Experiment 1 and the findings of Perdue and colleagues (1990), respectively. Prior to analysis, we discovered that some participants had occasionally responded with a value outside the intended scale range (of 1–7). Specifically, 40 responses (2.42% of the 1656 total trials) were given above the scale endpoint (i.e., the responses were an 8 or a 9 on the 1–7 scale). These scores were re-coded down to the maximum scale value of 7, though all analyses using the original values yielded identical results to those reported below. For each participant, we averaged (separately) their familiarity or positivity rating across the 18 syllables primed with ingroup pronouns and the 18 syllables primed with neutral pronouns. These averages were subjected to a 2 (prime: ingroup, control) × 2 (judgment type: positivity, familiarity) mixed-model ANOVA. This analysis yielded only a main effect of prime, $F(1, 44) = 12.68$, $p = .001$. Simple-effects analyses showed that for those who made familiarity judgments, syllables primed with ingroup pronouns ($M = 3.77$, $SD = 1.25$) were rated as more familiar than those primed with neutral pronouns ($M = 3.29$, $SD = 1.15$), $F(1, 44) = 7.52$, $p = .009$. Furthermore, for those who made positivity judgments, syllables primed with ingroup pronouns ($M = 4.04$, $SD = 0.83$) were rated as more appealing than those primed with

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[2] Six participants noted awareness that something was shown on the computer screen prior to the nonsense syllable presentation, though none were able to accurately identify the primes. If the analysis is run with these participants removed, we still find that ingroup-primed syllables were identified as more familiar ($M = 9.00$, $SD = 2.49$) than the neutral-primed syllables ($M = 7.9$, $SD = 2.59$), $F(1, 33) = 5.77$, $p = .02$.

[3] Unlike in Experiment 1, List A was always paired with the neutral pronouns and List B was always paired with the ingroup pronouns. Given that counterbalancing list did not interact with prime in Experiment 1, we did not counterbalance here.

neutral pronouns ($M = 3.76$, $SD = 0.85$), $F(1, 44) = 5.26$, $p = .03$. Thus, these findings confirm that pairing ingroup designators with neutral stimuli makes respondents perceive those stimuli as more familiar and positive.

Having established that perceivers find ingroup-pronoun primed stimuli to be both more likable and more familiar than their control-primed counterparts, we next performed a meditational analysis. This analysis could not be performed with participant as the unit of analysis because judgment type was manipulated on a between-subjects basis. That is, a given participant rendered either positivity or familiarity judgments, but not both. We designed the experiment this way because previous work has shown that positivity cues feelings of familiarity only (or primarily) under conditions in which the source of one's positive feelings are not salient. Specifically, Claypool and colleagues (2008) had participants read either a positive or neutral story and then judge which of a set of photos were old versus new. Half of the participants were asked, immediately after reading the story, to rate their current mood, whereas the other half were not. These authors reasoned that when a participant did not report his/her mood, that those who read the positive story would rate a greater number of the photos as familiar than those who read the neutral story. Participants in the positive mood condition would feel good and not know why, and thus attribute that good feeling to the familiarity of the subsequently-presented stimuli. On the other hand, when participants did report how the story made them feel, those who read the positive story would know that their positive feelings originated from the story, and thus those feelings would not be interpreted as diagnostic of the familiarity of the subsequently-presented stimuli. The results confirmed these hypotheses. Given this past work, we feared that if a participant in the current study reported how much he/she liked an ingroup-primed syllable and also how familiar it seemed, we would be unable to find an effect on the latter judgment. Moreover, in any research area, there is always the possibility that measurement of the mediator might bias the measurement of the outcome variable. Such problems are avoided completely by using the design employed here. Thus, judgment type was manipulated between-subjects and syllable was used as the unit of analysis.

To begin the analysis, for each syllable in the study, we calculated its average familiarity and positivity (appealing) score. Because the sample size was small in this case (there were only 36 syllables used), we employed the bootstrap method developed by Preacher and Hayes (2004, 2008) to test for mediation. Such bootstrapping techniques are gaining in popularity as they do not suffer from the low statistical power of the traditional Baron and Kenny (1986) procedure (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). In fact, according to these authors, "a more powerful strategy (than the Baron and Kenny approach) for testing mediation may be to require only: (1) that there exists an effect to be mediated... and (2) that the indirect effect be statistically significant in the direction predicted by the mediation hypothesis" (Preacher & Hayes, 2004, p. 719). Thus, we first regressed syllable familiarity onto the dummy-coded prime variable (0 = neutral; 1 = ingroup), and found a significant effect, $\beta = .47$, $t = 2.45$, $p = .02$. This established that ingroup-primed syllables were judged as more familiar than were neutral-primed syllables and that a direct effect exists. Next, we performed the bootstrapping procedures (using macros provided in Preacher & Hayes, 2008) to test whether this direct effect was mediated by perceived positivity. This analysis yielded a 95% bias-corrected confidence interval (based on 5000 bootstrap samples) for the indirect effect which did not include zero (.0007, .4272), indicating that the effect was mediated by positivity (see Fig. 1 for the beta weights).

It is important to convey that these stimulus-level results cannot be interpreted as clear evidence of the mediational process at
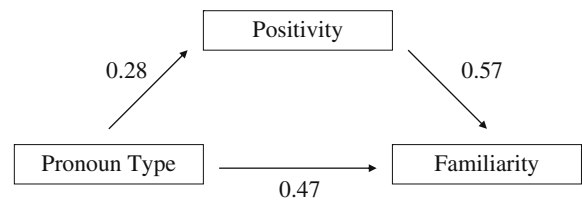

Fig. 1. The mediation model of the relationship between pronoun type and perceived familiarity. Beta-weights provided.

an individual level. Specifically, we cannot conclude that a participant felt, for example, that an ingroup-primed stimulus was perceived as more positive and more familiar (compared to control-primed stimuli), and that these two feelings were related within that person. Instead, these analyses tell us that ingroup-primed stimuli appear, on average, as more familiar than do control-primed stimuli, and this effect is to some degree explained by their averaged positivity (see Monin & Oppenheimer, 2005, for a detailed discussion of a similar issue). We speculate, however, that this process does occur at the individual level. And, indeed, the ingroup-pronoun-to-familiarity and the ingroup-pronoun-to-positivity relations were shown at the individual level in this study. Nevertheless, the full mediational model could not be tested at the individual level in this study, and although these results are consistent with our view of the process, its clear delimitation awaits further empirical testing.

General discussion

It is hard to imagine a full conversation absent the use of pronouns as general stand-ins for names and objects. Pronouns are, no doubt, useful grammatical tools that make communication more efficient, but they may also have implications for our overall experience with the objects with which they are associated. Indeed, Perdue and colleagues (1990) have shown that pairing an ingroup pronoun with an inconsequential symbol made that symbol seem more favorable. In our work, we have replicated Perdue et al.'s finding and also shown, for the first time, that those same types of pronouns make associated stimuli seem more familiar. Further, we have found that, at the stimulus level, the relation between ingroup-primed pronouns and perceived familiarity is mediated by positivity. These findings have interesting implications for the maintenance and enhancement of intergroup biases, and may be especially insidious as their influence is likely nonconscious.

In Experiment 1, we found that exposure to ingroup pronouns at extremely short durations, arguably outside of conscious awareness, made associated stimuli seem more familiar. In this case, there is reasonable evidence that the effect occurred nonconsciously, as participants were minimally or totally unaware of the priming stimuli. In Experiment 2, we replicated the ingroup pronoun-familiarity effect, but this time did so with more obvious exposure. In this case, participants were clearly aware of the priming stimuli, but may have been unaware of their possible influence on their familiarity judgments and thus the effect, even in Experiment 2, may have been the result of a nonconscious process (see Bargh, 1994, for a discussion of this issue). Regardless, we believe that the findings across studies are compelling as they show that the effect can occur both when opportunities for conscious processing are limited (Experiment 1) and also in more ecologically-valid circumstances (Experiment 2).This latter finding, in particular, suggests that even in everyday conversations, ingroup pronoun usage may be influencing our perceptions of familiarity.

Perdue and colleagues (1990) argued that the use of ingroup pronouns may help maintain intergroup bias because such words

nonconsciously trigger positivity. This positivity may then evaluatively influence the targets that are referenced by the pronouns. Thus, by using ingroup-designating pronouns, the positivity that is produced by their use may make the ingroup to which they refer appear even more positive to the speaker. Naturally, as the ingroup's positivity increases, there is a greater chance for intergroup bias to occur. In addition to Perdue et al.'s interpretation, ingroup pronouns could maintain or trigger intergroup biases via familiarity. Familiar stimuli themselves are viewed positively (e.g., Bornstein, 1989; Zajonc, 1968), which may activate the same intergroup biases suggested by Perdue and colleagues (1990).

The current findings also extend the positivity-cues-familiarity literature (e.g., Garcia-Marques et al., 2004; Monin, 2003). Namely, they show that linguistic stimuli associated with the ingroup are sufficiently positive to engender feelings of familiarity. Previous illustrations of the effect emerged for strongly-valenced positive words (e.g., Monin, 2003), for smiling (e.g., Garcia-Marques et al., 2004) and attractive faces (e.g., Monin, 2003), for neutral stimuli nonconsciously associated with smiling icons (Garcia-Marques et al., 2004) or happiness-inducing words (Phaf & Rotteveel, 2005), and for perceivers in happy moods (Claypool et al., 2008; Phaf & Rotteveel, 2005). In this case, a stimulus that was merely subtly positive because of its representation of the ingroup was sufficient to trigger feelings of familiarity.

Future directions

In addition to extending the literatures on how language shapes intergroup relations and the positivity-cues-familiarity effect, these findings have broad implications that should be examined further. For example, future studies might focus on whether linguistic stimuli that refer to the (singular) self also trigger feelings of familiarity. Numerous pieces of evidence suggest that for most individuals, the self is positively valued (e.g., Greenwald & Banaji, 1995; Greenwald & Farnham, 2000). Thus, given the positivity-cues-familiarity effect and the current findings, one might predict that stimuli paired with pronouns like "I" and "me" might be perceived as familiar too. And of course, because ingroup pronouns like "we" indirectly reference the self, a positive entity, this could partially explain why ingroup pronouns are themselves so valued (see Perdue et al., 1990, for a similar discussion), and why they triggered feelings of familiarity in our work.

Moreover, our findings may shed new light on other outcomes that typically occur as a result of ingroup-pronoun priming. For example, Brewer and Gardner (1996) had participants read a paragraph and circle all the pronouns in it. In one condition, these were ingroup pronouns (we, us), in another were outgroup pronouns (they, them), and in another were neutral (it). After, participants rated statements in terms of how similar they were to the perceiver's own attitude on the subject. Those who circled ingroup pronouns rated a higher number of the ambiguous statements as similar to their own positions compared to those in both the other two conditions. Brewer and Gardner (1996) argued that "the concept we primes social representations of the self that are more inclusive than that of the personal self-concept" (p. 87). Thus, from this perspective, "we" makes perceivers more inclusive, which makes them more willing to accept statements as similar to their own. While this interpretation is no doubt valid, the current findings suggest that familiarity may also be playing a role. Indeed, previous work has shown that merely-exposed (familiar) stimuli are rated as more similar to the self than are novel stimuli (e.g., Moreland & Beach, 1992). Thus, if ingroup pronouns trigger feelings of familiarity, as shown here, and familiarity can enhance perceptions of similarity, this may, in part, explain the Brewer and Gardner (1996) findings. Future studies should investigate this possibility.

This work may also have implications for research on false memories, as participants were more likely to mistakenly label a stimulus as familiar if it was associated with (positive) ingroup pronouns than if it was not. Positive affect has already been implicated in some types of false memories, namely those in a Deese–Roediger–McDermott task (Storbeck & Clore, 2005). In this task, participants are exposed to several words that are all related to another non-presented item (the "lure"), and a large number of participants tend to mistakenly "recall" this "lure" (Roediger & McDermott, 1995). Storbeck and Clore (2005) argued that because positive affect tends to increase relational processing (e.g., Gasper & Clore, 2002), a non-presented (but associated) lure might become more readily accessible and thus be "recalled" more frequently in those experiencing positive versus negative affect. Their results supported this hypothesis. Combined with the current results, these findings suggest that the use of subtle, positive stimuli during memory probes may encourage false recollections.

Finally, future extensions of this work might include conditions to further rule out "evaluative matching" as the process responsible for the ingroup-pronoun-familiarity effect. Most researchers working in the positivity-cues-familiarity literature argue that positivity can be misattributed to familiarity under the right circumstances. However, Corneille and colleagues (2005) wanted to test whether an attractive face (a positive stimulus) merely prompts a positive response ("familiar"). If the positivity-cues-familiarity effect occurs merely from such an evaluative match between the stimulus and the response, then the effect should not occur when one must signal a sense of familiarity by selecting a *negative* response option. To examine this, participants viewed faces that varied in attractiveness and indicated which were old and which were new by pressing a pleasant (butterfly) versus an unpleasant (rat) picture, respectively, whereas for other participants, the response mappings were reversed. Their results overwhelmingly refuted the "evaluative matching" explanation of the positivity-cues-familiarity effect and favored the misattribution explanation. Namely, attractive faces were falsely judged as more familiar regardless of response format and, in fact, this effect was descriptively stronger when participants had to click on a negative image to signal familiarity. Given this compelling demonstration that the positivity-cues-familiarity effect is not simply the result of an evaluative-matching process, we feel quite confident that our effect reported in this paper is not either. However, future work might benefit from showing this empirically.

Conclusion

At the broadest level, this work shows that language usage has implications for social perception. It seems that not only does strongly-valenced and offensive speech, like racial slurs (Greenberg & Pyszczynski, 1985; Simon & Greenberg, 1996), influence perceptions of others, but even the most common part of language, a pronoun, can shape our thoughts. Evidently, "we" is familiar, whereas "it" is not.

Appendix

Nonsense syllable List A:

XEH*
LAJ*
YOF*
YUB
CEH
YOL
XEK

LEQ
KAJ
QUG*
RES
XOP
PUX
HUZ
SEF
LOD
TUZ
WUH*

Nonsense syllable List B:

MAZ
KIH
SEH
POQ
JUK
GUB
YED
HOX
PEL
XOS
PIV
VUL
GIW*
XEJ
WAF
GID
HAN
QUN

*Taken from Perdue et al. (1990, Experiment 1); all others created by first author.

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