The pragmatics of swearing

TIMOTHY JAY AND KRISTIN JANSCHEWITZ

Abstract

The main purpose of swearing is to express emotions, especially anger and frustration. Swear words are well suited to express emotion as their primary meanings are connotative. The emotional impact of swearing depends on one's experience with a culture and its language conventions. A cognitive psychological framework is used to account for swearing in a variety of contexts and provide a link to impoliteness research. In support of this framework, native and non-native English-speaking college students rated the offensiveness and likelihood of hypothetical scenarios involving taboo words. The ratings demonstrated that appropriateness of swearing is highly contextually variable, dependent on speaker-listener relationship, social-physical context, and particular word used. Additionally, offensiveness ratings were shown to depend on gender (for native speakers) and English experience (for non-native speakers). Collectively these data support the idea that it takes time for speakers to learn where, when, and with whom swearing is appropriate.

Keywords: swearing, rudeness, taboo words, profanity, verbal aggression, impoliteness

1. The pragmatics of swearing[1]

The aim of this research is to develop a cognitive psychological framework to explain how swearing varies as a function of communication context. The goal of cognitive psychology is to examine our higher mental processes such as memory, language, problem solving, attention, decision making, and reasoning in order to explain how we think and behave in a variety of situations. Cognitive psychologists employ a number of methodologies, including laboratory experiments, developmental comparisons, simulations, clinical case studies, brain imaging, standardized

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testing, and observations of behavior in natural situations. Swearing is a topic that is most amenable to study in natural settings, but laboratory studies offer more control over variables of interest.

The focus of the present research is to examine how people attend to contextual variables such as speaker-listener relationship and social-physical setting in the process of swearing. We believe that people learn to judge when, where, and with whom it is appropriate to swear, or where swearing would be offensive. Offensiveness judgments provide the basis for determining the extent to which speech is rude or impolite. Our work is also informed by research on linguistic impoliteness, particularly as we describe native-non-native speaker disparity in the perception of the offensiveness and likelihood of swearing.

In this paper, we describe factors that influence the likelihood and offensiveness of swearing, as well as the relationship between swearing and politeness research. We believe that swearing is not necessarily impolite, inasmuch as offensive language is often used within the boundaries of what is considered situationally appropriate in discourse; further, some instances of swearing are neither polite nor impolite. Furthermore, we consider that one's experience with a language influences likelihood and offensiveness judgments about swearing. We present data that support the context-dependence of one's perception of the inappropriateness of swearing, both in terms of situational variables (e. g., location of the interaction that involves swearing) and those that involve the qualities of the participants in the interaction (e. g., speaker-listener relationship, whether the rater is a native or non-native speaker). We believe that language experience influences likelihood and offensiveness judgments about swearing. Fluent speakers, relative to those who are less familiar with a language, should have a broader and more flexible knowledge of the ways in which swearing can be construed as polite or impolite.

2. Swearing and (im)politeness

Swearing is the use of taboo language with the purpose of expressing the speaker's emotional state and communicating that information to listeners (see Jay 1992, 2000). In contrast to most other speech, swearing is primarily meant to convey connotative or emotional meaning; the meanings of the words themselves are primarily construed as connotative (Jay and Danks 1977). As constructed in popular news media, swearing is superficially understood, masking its deeper and more complex communicative function. Field studies of swearing (Jay 1992, 2000; Jay and Janschewitz 2006) have demonstrated that swearing in public is not an infrequent act, and most instances of swearing are conversational; they are not highly emotional, confrontational, rude, or aggressive. Through thousands of incidents of recorded swearing, we have never witnessed

any form of physical aggression as a consequence of swearing. From what we have observed, we argue that swearing can be polite, impolite, or neither and it may be used with any emotional state.

A common problem for impoliteness, rudeness, and swearing research is that all three phenomena are impossible to define universally because all are culturally and personally determined. Classic approaches to politeness (Brown and Levinson 1987 [1978]) frame interpersonal communication as situations in which a speaker's motivation is to promote social harmony and to avoid threatening the face (Goffman 1967) of a listener through behaviors such as swearing. These approaches do not necessitate an exploration of the vicissitudes of swearing. However, more recent approaches to politeness that encompass impoliteness and rudeness (Thomas 1983; Arndt and Janney 1985; Lakoff 1989; Kasper 1990; Beebe 1995; Culpeper 1996; Culpeper et al. 2003; Locher and Watts 2005; Bousfield 2007) incorporate situations where speakers intentionally or unintentionally use offensive speech for purposes other than social harmony. Here, explaining the various means and motivations for swearing is essential. For example, Lakoff (1989) explains why intentional verbal aggression is necessary in courtroom discourse. Beebe (1995) describes how people are intentionally rude in order to obtain power or vent negative feelings. Importantly, Locher and Watts (2005) argue that what is impolite cannot be universally construed, since impoliteness depends on the relationship between speaker and listener. Within impoliteness research, the impetus for swearing is explored and swearing is not regarded as merely a face threatening act.

When swearing is perceived as an affront to a listener, this may be considered rudeness on behalf of a speaker. Assessing whether swearing in discourse is rude involves the difficult task of determining participants' identity, relationship, social norms, intentions and motivations. Judgments of rudeness are not only determined by the propositional content of swear words but by a sense of what is appropriate in a particular situation. Knowledge of appropriateness (and accompanying knowledge of tabooness) is something fluent language users attain. We agree with Kasper (1990) that young children and non-native speakers require time and experience to attain an adult native speaker's knowledge of what is offensive or rude. Over time, speakers learn that politeness is not always the norm, as in situations where rudeness is warranted (e. g., courtroom discourse or venting negative emotions). Speakers learn that what is polite depends on the relationship between participants and the speech practices they negotiate (Locher and Watts 2005). Swearing may be appropriate (or politic) in a given situation and not regarded as merely polite or impolite.

We conceptualize all instances of swearing as either propositional or nonpropositional. Propositional swearing is consciously planned and in-

tentional – in this case, the speaker controls the content of the utterance. Within instances of propositional swearing, there is much overlap with research on linguistic impoliteness and rudeness. Propositional swearing can be polite or impolite, or potentially neither. It is polite when it promotes social harmony, as in face building (e. g., *This pie is pretty fucking good!*). It is rude when used to deliberately attack someone, as in face threat (e. g., *You fucking asshole!*); rude when used to aggressively bully or gain power as in Beebe's (1995) "strategic rudeness"; and rude (albeit less intentionally) when occurring as the result of a between-speaker disparity in understanding and adhering to the rules of politeness, which is "pragmatic failure" according to Thomas (1983). Swearing is also rude when it is used to publicly vent strong emotions as in "volcanic rudeness", which is predicated on the idea that it is rude to over-emote in any circumstance (Kasper 1990; Beebe 1995). We hasten to add that, as people sometimes report feeling better after venting strong emotions publicly, this behavior can be perceived as cathartic rather than rude (Jay et al. 2006).

In contrast to the above examples, nonpropositional swearing is unintentional, unplanned and uncontrollable. It involves automatic emotional responses, occurring most frequently in response to sudden bursts of emotion (e. g., surprise) or as a result of brain damage. We do not consider nonpropositional swearing polite or impolite, except to an uninformed listener who may be offended at the content of the utterance. The offense on the part of the speaker is unintentional.

Acts of swearing can be understood as the end products of neurological, psychological, and sociocultural (NPS) processes (see Jay 2000, 2003). Each of the NPS factors takes time to develop and evolve in one's life, as each factor depends on maturation and experience. While the focus of the present research is to explore sociocultural contributions to the perception of swearing as impolite or offensive, we briefly describe the three NPS factors and their impact on swearing.

3. Neurological factors

Neurological factors involve neurobiology that relates to emotional language use. Swearing is a product of language processing areas in the left frontal and temporal lobes as well as emotional processing areas in the right cerebral hemisphere and subcortical structures, most notably the amygdala. Enhanced amygdala activity (a neurophysiological marker of arousal) is found during initial processing of taboo words, and is associated with enhanced attention and superior memory for taboo words (Kensinger and Corkin 2004). Subjective behavioral ratings also suggest that taboo words' most potent emotional quality is arousal (e. g., Janschewitz in press).

The frequency of swearing depends on the integrity of brain areas implicated in cognitive control processes (e. g., ventral prefrontal cortex); damage to which is associated with an increase in socially inappropriate behaviors and speech, including swearing (Damasio 1994; Grafman et al. 1996). Damage to primary language areas (e. g., Broca's area) that results in aphasia commonly produces increased swearing and exaggerated emotional reactions. Conversely, damage to the right hemisphere results in emotional indifference and blunted emotional speech comprehension and production. Neurological dysfunction in or near the amygdala is commonly associated to changes in the fight or flight mechanism, such that patients have extreme emotional responses or none at all (see Adolphs et al. 1999). Compulsive swearing, or coprolalia, has been associated with neurological conditions in Tourette syndrome, dementia in Alzheimer's disease, senile dementia, and epilepsy (Jay 2000).

Neuropsychological research (see Jay 2000) has revealed that swearing episodes exist on a continuum from thoughtful and purposeful (e. g., one chooses a particular swear word for a joke) to automatic and uncontrollable (e. g., Touretters' outbursts). These findings underlie the distinction between propositional and nonpropositional swearing mentioned earlier (see also van Lancker 1987). Neurological factors influence both propositional and nonpropositional swearing, but nonpropositional utterances make it particularly clear that we are not always able to control swearing; emotions arise involuntarily. Psychological and cultural factors play a significant role when one has the time and resources to make conscious word choices.

4. Psychological factors

The psychological aspect of swearing follows a maturational time course and depends to a great degree on one's experiences during development. Psychological factors most directly associated with swearing are trait anger, religiosity, sexual anxiety, verbal aggressiveness, and Type A personality (Martin and Anderson 1997; Jay 2000, 2005; Deffenbacher et al. 2004; Rancer and Avtgis 2006). Gender plays an important role in swearing, as boys and girls are socialized differently. The coping strategies of men and women differ to a degree, which affects the frequency of use of swear words. For example, cultural norms for the expression of anger or aggression vary by gender, and women and men use these emotions differently. Men are more likely than women to swear when frustrated or angry, while women are more likely than men to view swearing in anger as loss of control and realize that swearing might jeopardize their relationships with others (Bird and Harris 1990). Field studies reported by Jay and Janschewitz (2006) demonstrated that swearing depends on the gender of the speaker and the gender of the listener, that is, men and

women swear at roughly the same rate but men use more offensive language than women, especially in the company of other men.

We have also shown that the kinds of words one uses to swear and insult others change over the course of development (Jay 1992). Young children use words such as *fraidy cat* or *pooh-pooh* that will later drop out of adolescent and adult swearing lexicons. Children are more sensitive to mild taboo words (e. g., *fart, dork, wimp*) than adults, who find mild words inoffensive (Jay and Janschewitz 2005). Adolescents are more sensitive than young children to the multiple meanings of taboo words such as *baby, pig*, or *balls*. Adults are more likely than children to draw on abstract, symbolic, and political aspects of experience, as in the use of *damned Nazi* or *sexist bastard*.

No one is born knowing how to swear; we learn this from parents and peers. Presently little is known about factors underlying the initial acquisition of swear words. We have proposed that one's personal experience of being punished for swearing, for example, having soap put in one's mouth, classically conditions the emotional reaction to swear words (Jay et al. 2006). Parental punishment for swearing is not universal, as we discuss in the following section (see White 2002). Further, how one is punished or rewarded for swearing affects one's likelihood of swearing in a particular context. Children learn that they can swear more freely on the playground than in the classroom. One's developmental sensitivity to context brings us to the question of cultural contexts.

5. Sociocultural and pragmatic factors

Sociocultural influences on swearing vary from culture to culture and take some time and experience within a culture to be fully appreciated. Swearing is influenced by pragmatic (contextual) variables such as the conversational topic, the speaker-listener relationship, including gender, occupation, and status, and the social-physical setting of the communication with respect to whether the swearing takes place in a public or private location, one's jurisdiction over the location, and the level of formality of the occasion. These variables allow us to determine when swearing is likely or unlikely, when it is an affront to appropriateness.

What speech is appropriate in a given situation depends in part on the topic of conversation. Consider trying to converse about a taboo topic such as sex. People find it difficult to discuss sexuality (e. g., menstruation, masturbation, intercourse) and sex talk is avoided because it is likely to cause anxiety. Sexual slang is too offensive and clinical terms are unfamiliar and unable to capture fully one's feelings about sex. A good means of locating taboo conversational topics is to listen for the presence of euphemisms in conversations, which are by definition terms

that are used to avoid more offensive counterparts. We say that we *make love* in mixed company but not that we *fuck* (see Allan and Burridge 1991).

Another powerful influence on the likelihood of swearing is the social and physical location of the dialogue. People are more likely to swear in relaxed environments than in formal environments. In order to get a better sense of how people evaluate swearing as a function of context, we asked a group of college students to estimate the likelihood of hearing swearing in various college campus locations (Jay 1992). Locations populated by students, especially the dorms and pub, were the most likely places to hear swearing, while academic offices and campus services locations were rated the least likely to hear swearing. Related research on the likelihood of hearing sexually explicit language and sexual jokes indicates that we are more comfortable with sexual language in relaxed settings than at work (Pezdek and Prull 1993).

Speaker-listener relationship, in terms of status (e. g., education, income, occupation), is another critical determinant of swearing likelihood and appropriateness. One simple means of objectifying status is through job title, for example, a doctor has more status than a nurse, and an academic dean has more status than a janitor. To measure students' perceptions of the effect of status on swearing we presented college students with a list of male and female occupations and asked them to judge how likely each man or woman in that occupation was to swear and how appropriate it would be if they did (Jay 1992). We selected occupations that were represented on campus from rankings of occupational prestige from previous sociological research (Miller 1977). There were differences in occupation as a function of gender and status; for example, men were always expected to swear more than women in equivalent occupations and higher status personnel (e. g., dean) were expected to swear less than lower status personnel (Jay 1992).

One's relationship with the speaker can have a significant impact on what is considered impolite or rude (Locher and Watts 2005). How would you feel if your best friend insulted someone with a taboo phrase? How would you feel if your worst enemy used that same phrase to debase the same person? Several years ago we documented how friendliness affects the use of and comprehension of swear words (Jay 1981). Participants were asked to judge how much they would like a person who was described with taboo and nontaboo adjectives (e. g., *shitty, greedy person*) either by their best friend or by their worst enemy. The results were clear: the target person was liked less when described by one's best friend than one's worst enemy. Our friends are more persuasive or credible when they demean another person; conversely we are more likely to discount comments by our enemies. Similarly, Martin et al. (1996) showed that

receiving verbally aggressive messages from friends is more hurtful than receiving them from acquaintances.

Gender plays a powerful role in swearing. Most people swear more around listeners of the same gender than in mixed crowds. We have plenty of field data to show this effect, as well as to demonstrate that the trend develops in childhood and continues into adulthood (Jay and Janschewitz 2006). Frequency of use data reported in Jay (1992) show that men are more likely to swear in public than women, that men use more offensive words than women, and that both women and men are more likely to swear in same-sex contexts than in mixed-sex contexts. Research by Wells (1989, 1990) further demonstrates that the use of vulgar terms for various sexual acts and genitalia is more likely with same-sex listeners than for opposite-sex listeners or parents.

To examine the effect of contextual variables on swearing in more detail, Jay (1992) asked a group of college students to estimate the likelihood and the offensiveness of swearing as a function of the speaker, location, and particular word used. Changes in these situational variables affected students' likelihood and offensiveness judgments, indicating that they were sensitive to dimensions of social and physical contexts as they relate to swearing or rudeness. Their likelihood estimation rankings were highly correlated with public swear word rankings (see Jay 1978).

Sociocultural knowledge regarding swearing, rudeness, or impoliteness is acquired as the product of living in a culture and contacting different communities of practice which reward, punish, or are indifferent to offensive speech. Reactions to swearing are pointedly marked by power and status relationships. In Australia, police routinely arrest indigenous adolescent males for using "offensive" words such as *fuck* or *cunt,* which the same police use freely in public without sanction (White 2002). To fully understand swearing, one has to appreciate the contexts and communities in which it occurs. Not everyone is as anxious about swearing as middle-class American speakers. In some indigenous communities in Australia, swearing at or in front of one's mother is not considered rude (White 2002). This pattern is different in "Western" societies, where most parents punish their children for swearing at or in front of adults (Jay et al. 2006).

Multilingual knowledge of swearing in native and non-native languages is a topic that bridges psychological development of swearing and cultural influences on swearing. Native and non-native speakers have different knowledge of swearing, politeness and rudeness (Thomas 1983). Dewaele (2004) demonstrated that the perceived emotional force of swear words is highest in one's native language and gradually declines in languages learned later. This is especially true for speakers who learn non-native languages in the classroom as opposed to natural contexts.

In line with Dewaele's finding, Harris et al. (2003) showed higher autonomic nervous system reactivity to taboo words presented in a native language than in a second language. As for gender differences in multilingual swearing, Dewaele (2004) also reported that, overall, female participants gave higher scores than male participants to the perceived power of swear words, confirming and extending what we have reported about gender differences in native American English speakers.

Our use of and reaction to swear words tells us who we are and where we fit in a culture; in short, our identities are marked by our use of swear words. Through cultural experiences we learn what words are deemed polite or impolite in particular situations, as is espoused in relational theory (Locher and Watts 2005). Similarly NPS theory (Jay 2000) proposes that people learn to swear under conditions that foster or reward swearing (e. g., getting respect from peers for swearing fluently). We learn to inhibit swearing in situations where there is a personal cost, such as being punished or losing face. Any number of social sanctions can influence our use of swear words; these may be as drastic as getting sacked at work or as mild as receiving dirty looks in public. Situations in which we inhibit our use of swear words (e. g., wedding ceremonies or church services) are markedly formal. Informal situations during which swearing is more likely include athletic competitions, bar conversations, or working class laborer conversations. Informal situations can also exclude swearing, for example, talking to your grandmother. Swearing, like strategic rudeness (Beebe 1995), may also be socially advantageous, and therefore likely, as instrumental aggression (e. g., a schoolyard bully may be verbally aggressive to intimidate his mates and make them compliant).

One way to compare inappropriateness across cultures is to examine cross-cultural comparisons of taboo words used by Touretters (Jay 2000). By definition Touretters' behaviors and speech during coprolalic episodes are those deemed most socially inappropriate. Another avenue of cross-cultural contrast is to compare attitudes and perceptions of multilinguals.

6. Present research: Bilinguals' perceptions of swearing in English

We have presented evidence that native speakers' knowledge of swearing appropriateness is contextually flexible; able to dictate a number of ways in which swearing can be appropriate or impolite. In the course of learning a new language, we suggest that a non-native speaker, like a native child, will acquire the knowledge that some words are taboo before developing a nuanced understanding of how and when to use taboo words. The goal of the present study was to show that native speakers' judg-

ments about the appropriateness of taboo language are informed by the tabooness of the particular word used as well as the speaker and location of the utterance. In contrast, non-native speakers' judgments about appropriateness should be less sensitive to the overall offensiveness of the utterance as well as contributing contextual factors.

The present experiment tested the effects of English experience and gender on ratings of offensiveness and likelihood of use of taboo words in different social and speaker contexts. This research was a replication and extension of Jay (1992), which manipulated speaker, location and word in hypothetical scenarios involving taboo words. As in Jay (1992), an inverse relationship between offensiveness and likelihood was expected, and ratings were expected to depend on contextual variables, with the highest offensiveness and lowest likelihood ratings pertaining to high status speakers who used highly offensive taboo words in campus locations that were not considered their turf (Jay 1992, 2000).

Native English speakers were expected to have a more context-dependent sense of appropriateness than non-native English speakers, reflected by greater variability in offensiveness and likelihood ratings relative to non-native speakers. Non-native speakers' degree of English experience was accordingly expected to influence their overall estimates of likelihood and offensiveness. We expected lower offensiveness ratings from non-native speakers to whom English was learned most recently. Both subjective estimates of taboo word offensiveness (Dewaele 2004) and measures of autonomic reactivity in response to taboo words (Harris et al. 2003) have been demonstrated to be lower with less experience in a non-native language. A gender difference was expected for both native and non-native speakers such that women were expected to provide higher offensiveness ratings than men.

Participants were 121 undergraduate students from the University of California at Los Angeles who were compensated with course credit for participating. Sixty-eight were native English speakers (41 women, 27 men; age $M = 20.27$, $SD = 1.97$ years) and 53 were non-native English speakers (34 women, 19 men; age $M = 20.75$, $SD = 2.44$ years). Non-native speakers provided estimates of their amount of experience with English ($M = 11.82$ years; $SD = 4.43$ years) and the age at which they became fluent in English ($M = 11.57$ years; $SD = 5.84$ years). The composition of our non-native sample reflected diverse native language backgrounds: 11 Chinese (Cantonese, Fukien, Mandarin, or unspecified); 10 Korean; 8 Spanish; 5 Indonesian; 5 Vietnamese; 3 Farsi; 3 Russian; 2 Bulgarian; and 1 each of the following: Hungarian, Igbo, Italian, Japanese, Polish, and Tagalog.

We used a mixed $3 \times 3 \times 3 \times 2 \times 2$ design to manipulate three within-subjects contextual variables and the between-subjects variables

of gender (female and male) and English experience (native or non-native) of our raters. The within-subjects variables were the speaker status (dean, student, janitor), location (dean's office, dorm room, parking lot), and tabooness of a word (high, medium, low) presented in hypothetical scenarios. All combinations of these variables were presented twice throughout the course of the experiment, once in a questionnaire measuring the offensiveness of the scenario and once in a questionnaire measuring the likelihood of the scenario. All ratings were made on a 1–7 Likert scale where 1 meant low offensiveness or likelihood, and 7 meant high offensiveness or likelihood.

Speakers and locations were chosen to be familiar to our student sample. The level of tabooness of taboo words came from ratings from a previous UCLA norming study. Taboo words high in tabooness were *cocksucker, cunt* and *fuck*. Medium-tabooness words were *bastard, goddamn,* and *piss*. Low taboo words were *crap, hell* and *idiot*. All combinations of these taboo words and the speakers and locations mentioned above were presented in each questionnaire, creating a total of 81 scenarios per questionnaire. An example question was: *How likely would it be to hear a dean say "idiot" in a dorm room?* Four versions of each questionnaire were created with scenarios in randomized order, to control for within-questionnaire order effects. A demographic questionnaire, which assessed participants' experiences with English, was also administered.

The research protocol was approved by the UCLA Institutional Review Board according to their standards for treatment of participants. Informed consent was obtained at the beginning of the experiment. No participants declined to participate after being warned about the content of the questionnaires. Participants completed the experiment individually. The demographic questionnaire was given first; following that, participants received the offensiveness and likelihood questionnaires in counterbalanced order, so that across all participants each questionnaire was presented an equal number of times first. Across all participants the different randomized orders were presented an equal number of times, and the presentation of the orders varied independently. Completion of all questionnaires was self-paced, typically taking 30 minutes.

7. Results

Offensiveness and likelihood ratings were analyzed separately with 5-way mixed ANOVAs. Speaker, location and tabooness were within-subjects factors and gender and English experience were between-subjects factors. Greenhouse-Geisser corrections were used on all significant F and associated values that violated the assumption of sphericity. All post hoc tests were evaluated using a Bonferroni correction to maintain an alpha level of .05.

8. Context effects on offensiveness and likelihood ratings

For offensiveness ratings, significant main effects were found for speaker ($F(2, 178) = 97.93$, $MSE = 2.72$, $p < .001$), location ($F(2, 178) = 350.79$, $MSE = 2.96$, $p < .001$), and tabooness ($F(1, 165) = 577.07$, $MSE = 4.12$, $p < .001$). Significant speaker-location ($F(2, 290) = 179.58$, MSE

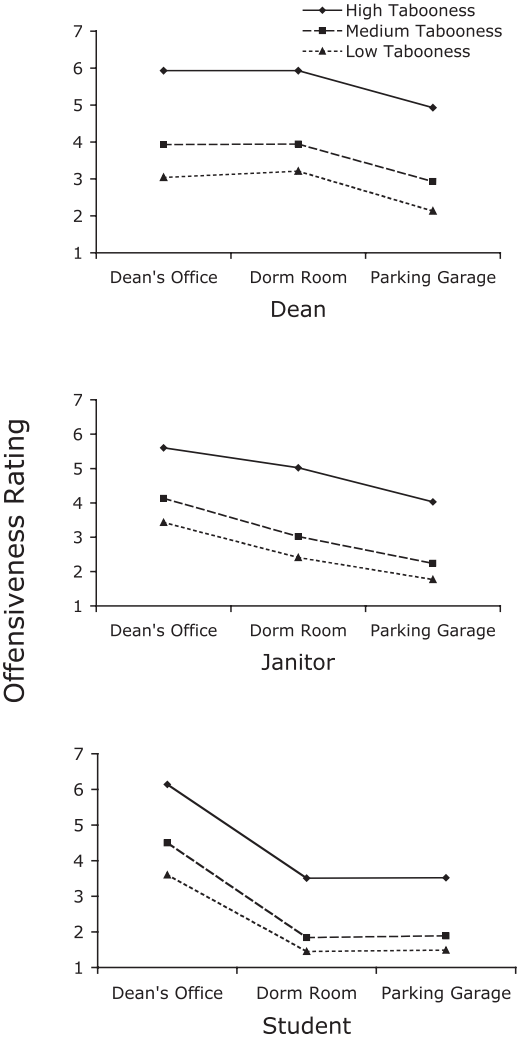

Figure 1. *Speaker-location-tabooness interaction for offensiveness ratings. Graphs present ratings by speaker; lines represent tabooness of word.*

= 1.24, $p < .001$), location-tabooness ($F(3, 298) = 4.85$, $MSE = 0.82$, $p = .004$), and tabooness-speaker ($F(3, 397) = 21.68$, $MSE = 0.42$, $p < .001$) interactions were also obtained. These effects are best summarized in the significant speaker-location-tabooness interaction ($F(7, 766) = 3.69$, $MSE = 0.31$, $p = .001$), illustrated in Figure 1.

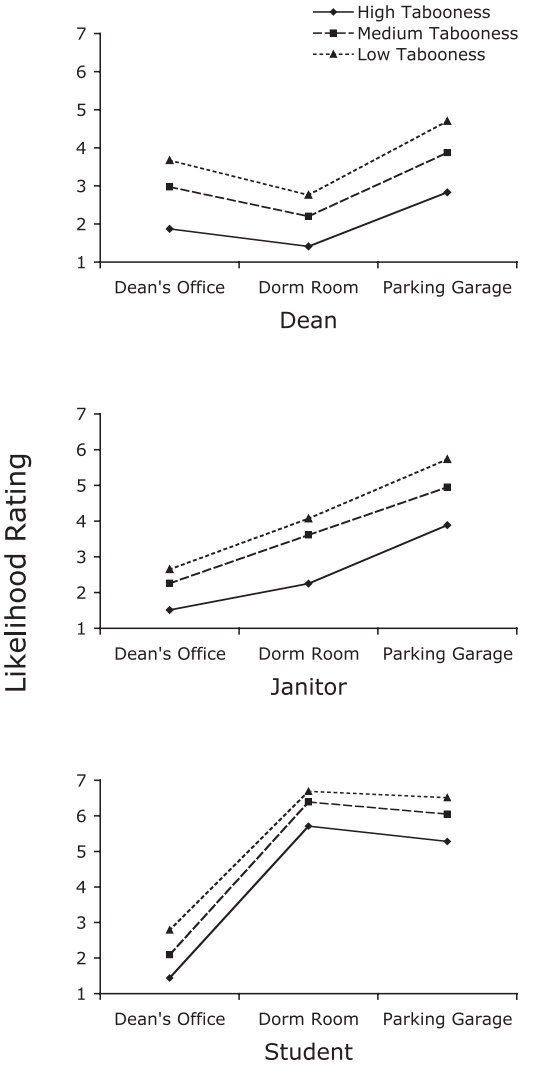

Figure 2. *Speaker-location-tabooness interaction for likelihood ratings. Graphs present ratings by speaker; lines represent tabooness of word.*

Similarly, for likelihood ratings, main effects were found for speaker ($F(2, 234) = 332.98$, $MSE = 2.76$, $p < .001$), location ($F(2, 211) = 580.60$, $MSE = 3.07$, $p < .001$), and tabooness ($F(2, 182) = 377.60$, $MSE = 1.92$, $p < .001$). Significant speaker-location ($F(3, 398) = 388.75$, $MSE = 1.58$, $p < .001$), location-tabooness ($F(3, 356) = 4.20$, $MSE = 0.70$, $p = .006$), and tabooness-speaker ($F(3, 335) = 10.12$, $MSE = 0.88$, $p < .001$) interactions were also found. As was the case for offensiveness, these effects are summarized in the significant speaker-location-tabooness interaction ($F(4, 468) = 7.60$, $MSE = 0.92$, $p < .001$), illustrated in Figure 2. Offensiveness and likelihood ratings were significantly negatively correlated with each other (Pearson's $r = -.44$, $p = .01$).

9. Effects of English experience

Overall, there was no main effect of English experience (native versus non-native) on offensiveness or likelihood ratings. Certain results, however, supported our prediction that native English speakers would show more variability in ratings compared to non-native speakers. Significant interactions were obtained between English experience and speaker ($F(2, 178) = 3.43$, $MSE = 2.72$, $p = .05$) and English experience and tabooness ($F(1, 165) = 4.02$, $MSE = 4.12$, $p = .03$) for offensiveness ratings, and between tabooness and English experience for likelihood ratings ($F(2, 182) = 3.68$, $MSE = 1.50$, $p = .04$). In each of these cases, post hoc tests that compared English experience within a single level of the within-subjects variable were nonsignificant. However, in each case, the range between the highest and lowest average condition rating was larger for native than non-native speakers. These effects are illustrated in Figure 3. For the speaker × English experience interaction, the range between dean (highest overall offensiveness) and student (lowest overall offensiveness) was 0.72 for non-native speakers and 1.06 for native speakers. For the tabooness × English experience interaction, native speakers provided a greater range between high tabooness and low tabooness offensiveness ratings (2.74 compared to 2.34). The same pattern was obtained for the range of tabooness on likelihood ratings (1.67 for native speakers versus 1.37 for non-native speakers).

One reason for the lack of a main effect of English experience may lie in the variability of English experience in our non-native English sample. Figure 4 shows the relationship between English experience and participants' average offensiveness and likelihood ratings for non-native speakers. The measure of English experience is self-reported age of fluency in English. There was a significant positive correlation between age of fluency and average offensiveness rating (Pearson's $r = .60$, $p < .001$); that is, the later in life participants reported becoming fluent in English,

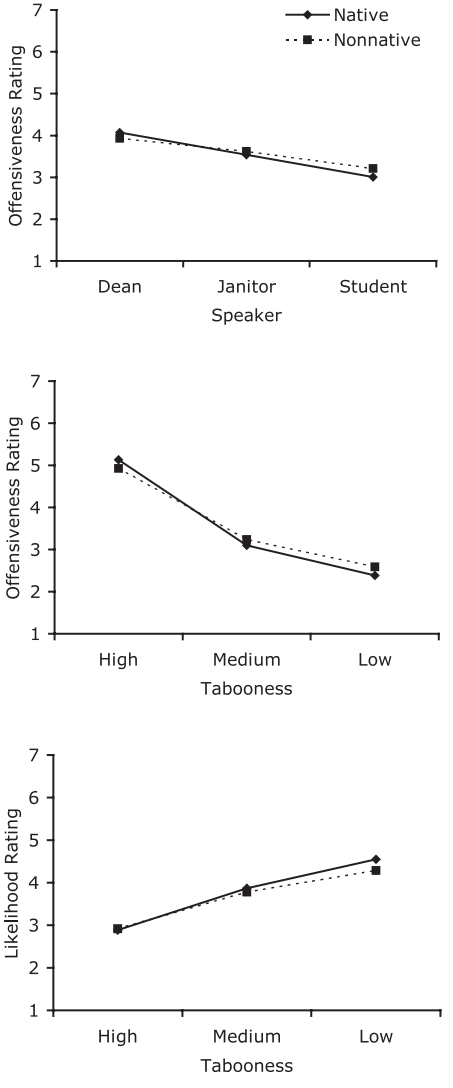

Figure 3. *Interactions which demonstrate effects of English experience on variability of ratings. Taken collectively, these show greater variability for native compared to non-native speakers. Separate lines represent native and non-native English speakers. From top to bottom: English experience × speaker on offensiveness; English experience × tabooness on offensiveness; English experience × tabooness on likelihood.*

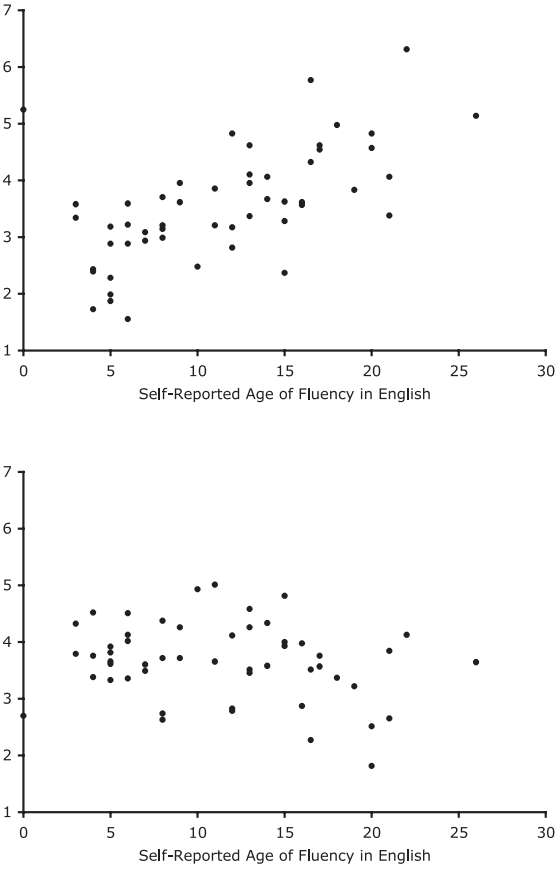

Figure 4. *Correlation between self-reported age of fluency in English and average offensiveness and likelihood ratings for non-native English speakers. For offensiveness ratings (top), there is a significant positive relationship ($r = .60$) such that as age of fluency increases, offensiveness rating increases. For likelihood ratings (bottom), this relationship is nonsignificant ($r = -.20$), but trends in a negative direction.*

the higher their average offensiveness rating. The relationship between age of fluency and average likelihood rating trended in a negative direction, but was not statistically significant (Pearson's $r = -.20$, $p = .15$).

We subsequently performed a median split on the non-native English speaking group based on self-reported age of fluency, creating an early group ($n = 27$, self-reported age of fluency 0−11 years) and a late group ($n = 26$, self-reported age of fluency 12−26 years). We ran $3 \times 3 \times 3 \times 2$ mixed ANOVAs on offensiveness and likelihood ratings with speaker, location and tabooness as within-subjects variables and age of fluency

(early and late) as a between-subjects variable. The test for offensiveness confirmed that early and late groups differed significantly in average offensiveness rating ($F(1, 51) = 23.75$, $MSE = 18.98$, $p < .001$); the late group provided a higher average offensiveness rating ($M = 4.13$, $SD = 0.89$) than the early group ($M = 3.01$, $SD = 0.84$). As is suggested by the correlational data, the test for likelihood did not show a significant main effect of English experience.

While likelihood and offensiveness ratings were found to be significantly negatively correlated for the sample as a whole, as well as for the subset of native English speakers (Pearson's $r = -.24$, $p = .05$), this relationship was not significant for the subset of non-native English speakers (Pearson's $r = -.21$, $p = .13$). It seems likely that the dependency of age of fluency on offensiveness rating and the lack of any relationship between age of fluency and likelihood rating is responsible for the nonsignificance of the offensiveness-likelihood correlation.

10. Effects of gender and language experience

In support of our prediction that women would provide higher offensiveness ratings than men, a significant interaction between the gender of the rater and his or her English experience was obtained ($F(1, 117) = 4.135$, $MSE = 22.09$, $p = .04$). Post hoc tests showed a trend toward a gender difference on overall offensiveness ratings for native English speakers ($t(66) = 1.96$, $p = .05$, uncorrected); offensiveness ratings were numerically higher for women ($M = 3.68$, $SD = 0.88$) than men ($M = 3.26$, $SD = 0.86$). There was no gender difference in offensiveness ratings for non-native speakers ($p = .50$).

11. Conclusions

Our results replicated earlier findings by Jay (1992), demonstrating that people are sensitive to pragmatic variables underlying swearing: speaker, location, and type of word. This sensitivity to offensiveness and likelihood provides a basis for judgments about appropriateness. Generally speaking it is less appropriate for a dean to swear than it is for a student. We expect a dean to exercise more restraint and caution because the dean is in a position of respected authority. Appropriateness also depends on setting. Although it is less appropriate for a dean to swear than it is for a student, it is more appropriate for a dean to swear in the office than it is to swear anywhere else on campus. Conversely it is very inappropriate for a student to swear in a dean's office while it is entirely appropriate in a dorm room. Notably, in all contexts the actual taboo word used greatly affects appropriateness − all taboo words are not equal.

We found no difference within our sample of level of English experience (native versus non-native) on offensiveness or likelihood ratings. Our sample is biased because our non-native speakers are proficient enough in English to attend college. Another constraint on judgments about swearing for our sample is that swearing is normative on a college campus. The university is a place where swearing is tolerated, if not expected, and college students are sensitive to this freedom. The language values of college students support the liberal use of swear words, and non-native English speaking college students' values are more liberal than those of other non-native speakers. Non-native English speaking college students not only have more experience with English than a non-native, non-college cohort, they also have more experience with swearing in English than a non-college cohort. It is likely that a larger sample of non-native speakers with less English proficiency (e. g., all late learners) would have produced the native versus non-native differences we expected. Our decomposition of the non-native sample into early and late learners suggests this, as these groups differed significantly on offensiveness judgments. Future research should also employ a more objective measure of foreign language proficiency than one's estimate of one's proficiency. Subjective estimates of fluency can be especially problematic for non-native speakers who learned a second language in childhood.

We confirmed the prediction that native English speakers are more responsive to the influence of contextual variables in swearing scenarios than non-natives. This is evidenced in interactions between contextual variables (tabooness and speaker) and English experience on offensiveness and likelihood judgments; non-native speakers provided a narrower range of ratings. This suggests that greater English experience is associated with higher sensitivity to the nuances of situational determinants of swearing. With more experience, each scenario can be evaluated on its own unique merits, the composite of speaker-listener relationship, physical setting, and individual word used.

Our prediction that age of fluency would be negatively correlated with offensiveness and likelihood ratings was not supported. We expected that the later learners would not have the opportunity to learn the emotional significance of language, which naturally emerges during socialization in childhood. Contrary to our prediction our scenarios were rated as less offensive to non-native speakers with more English experience. It seems that late-learning non-native English speakers are aware of the offensiveness of taboo language but less aware of the way in which speech context moderates offensiveness. We assumed that non-native speakers would not appreciate the emotional meaning of taboo English words. Thomas (1983) labels this pragmalinguistic knowledge. Instead what non-natives probably do not appreciate as well as natives is the diversity of the social

functions the word can take on, that is, the sociopragmatic use of taboo words.

Our prediction of a gender difference in estimates of offensiveness was supported, but only for native English speakers. In this case, women provided higher offensiveness ratings than men. This finding is consistent with our frequency data showing that women use offensive language less frequently, and when they do use offensive language, they use less offensive words. This pattern of results has been stable over the last thirty years (see Jay, 1992, 2000, Jay and Janschewitz 2006). The lack of a corresponding finding for non-native speakers is difficult to parse, particularly because of the nature of our non-native English speaking sample, the members of which came from a wide range of language and presumably cultural backgrounds.

12. General discussion

Interpersonal swearing is a complex communicative act that is influenced by contextual variables such as speaker-listener relationship, social and physical setting, and the topic of discussion. As an analysis of the speech situations that give rise to swearing, much of what we have addressed in this paper contributes to our understanding of politeness behaviors regarding swearing in public. Generally speaking, swearing is appropriate and not impolite amongst peers in casual settings. In formal contexts and with participants of unequal status, swearing is not expected.

We propose that people have context-sensitive knowledge of swearing appropriateness that amounts to the rules for swearing or the etiquette of swearing. In this framework, swearing etiquette is directly related to research on impoliteness and rudeness in linguistics because these implicit rules for swearing provide the basis for one's judgment about what is appropriate in a given social setting. This kind of judgment is integral to the way we define propositional swearing, in which utterances are made purposefully, and it takes time and experience to develop. The exact course and nature of how people learn the etiquette of swearing remain to be discovered. We assume that a good deal of this knowledge is acquired early in childhood, at least by the time a child goes off to school at age five.

The developmental nature of swearing etiquette raises another important question regarding non-native language learning, that is, how readily do non-native speakers learn the rules for swearing in the non-native language? Non-native English learners receive formal instruction in classroom situations (the pragmalinguistic) but how and where do they learn to swear in English? We are just beginning to understand some of the parameters of swearing in one's non-native language, although we

do know that non-native speakers find their native language more powerful and more emotionally expressive than languages learned later in life (Harris et al. 2003; Dewaele 2004). We demonstrated that non-native English speaking college students have a solid understanding of the appropriateness of using swear words in the context of our experimental materials; however, some of their data suggest they are less sensitive to contextual variability (the sociopragmatic) than native English speakers. Likewise, offensiveness estimates depend on when one has become proficient in the non-native language.

We find that linguists and psychologists have much to gain by looking at each other's explanations for impoliteness. The cognitive psychology approach to swearing adds to politeness literature regarding how people swear in public, the words they use and who uses them and where. Laboratory studies conducted in a controlled environment allow psychologists to ask particular questions about peoples' perceptions and attitudes about swearing. When psychologists' data are combined with linguists' studies of situated impoliteness, we gain a more comprehensive view of taboo language use. We can see the range of social functions swearing can take on, and we can describe how one's knowledge of when swearing is appropriate is informed by language and cultural experience.

Note

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