Effects of Interaction-Based Instruction on Second Language Learner Recognition of Sarcasm in American English

Seval Karakoc

Northern Arizona University

Abstract

Sarcasm, also called verbal irony, is a prevalent pragmatic feature in English and it is important that L2 learners learn how to recognize the use of sarcasm in order to better participate in the culture of their second language. However, sarcasm has only recently started receiving attention in the second language learning literature. The present study investigates whether interaction-based instruction has an effect on second language learners' recognition of sarcasm. The study involved 21 international studies enrolled in the Program of Intensive English at Northern Arizona University. Both the experimental group and the control group in the study were given a web-based pretest and a posttest to measure their recognition of sarcasm. The experimental group also received a 75-minute-long instruction using three tasks between the two tests while the control group did not receive any type of instruction. Findings from the study revealed that the experimental group received higher scores on the posttest compared to the pretest. This shows that the participants benefited from interaction-based instruction and their awareness of sarcasm increased. The results of this study contribute to an understanding of the role of sarcasm instruction in second language classrooms. Practical suggestions for pedagogy and future research are also identified.

Keywords: pragmatics, sarcasm, recognition, explicit instruction

Effects of Interaction-Based Instruction on Second Language Learner Recognition of Sarcasm in American English

Background

Sarcasm, also called verbal irony, is speech that has a semantic interpretation exactly opposite to its literal meaning (Tepperman, Traum, & Narayanan, 2006). In English, sarcasm serves a variety of purposes depending on the intentions of the speaker. Sarcasm enables speakers to express hostility in a socially acceptable way (Kreuz, 2000; Ivanko, Pexman, & Olineck, 2004), to save face by making the speaker appear less rude and unfair, especially when expressing criticism (Jorgensen, 1996), vent frustration, or build solidarity with humor (Slugoski & Turnbull, 1988; Kim, 2014; Peters, Wilson, Boiteau, Gelormini-Lezama, & Almor, 2016).

It is challenging for listeners to detect and understand sarcasm, given that, when a speaker chooses to be sarcastic, the literal meaning of their utterance is the opposite of the intended pragmatic meaning. There is a high probability that sarcasm might be misunderstood because it relies on the speaker and the listener having the same understanding of the meaning of the utterance (Marcello, 2012). Given the difference between speakers of the same language, we can assume that it might be harder for non-native speakers as well, especially if they have a limited range of vocabulary. Having a limited range of vocabulary possibly requires extra effort to process the discrepancy between the literal meaning of an utterance and the contextual information as well as the interface between phonology and pragmatics.

A review of the literature revealed that, while there is literature that addresses the various features by which sarcasm can be recognized, it mostly addresses how native speakers recognize

sarcasm. There is relatively little research done on the recognition of sarcasm by L2 learners in English in the literature. It is possible that students may benefit from instruction on the use and recognition of sarcasm. The purpose of this study is to explore whether an interaction-based approach is effective in increasing second language learners' awareness in sarcasm in American English.

Research Question

- Does interaction based instruction increase second language learners' ability to recognize sarcasm in American English?

Methods

Participants

Two intact groups taking the PIE 105 English composition course at Program in Intensive English (PIE) at Northern Arizona University (NAU) were used. The study included 13 students in the experimental group and 8 students in the comparison group. Most of students are native speakers of either Arabic or Chinese with one native Amharic speaker. The students had a level 6 proficiency on the PIE scale which is equivalent to a score of 70 to 100 on the TOEFL iBT. This population was chosen because it is assumed that only learners with high level of proficiency are able to undertake pragmatic tasks (Bouton, 1999; Takahashi, 2010; Bardovi-Harlig, 2001).

Instruments

A web-based pretest and posttest were used. The pretest consisted of 16 multiple choice and short answer items, and the posttest consisted of 16 multiple choice items. Eight questions of the posttest were the same as the pretest and 8 of them were new.

In each test, the first 12 questions measure vocal, facial, and situational context cues using six videos. The videos were taken from the popular American TV shows *House M.D.*, *Friends*, and *The Big Bang Theory*. The length of the videos ranges between 30 seconds to 1 minute. The participants watched the videos and first identified whether the utterance is sarcastic or not. The relationship between the speakers, the description of the person that utters the sincere or sarcastic sentence, and the transcription of the sentences were provided in the instructions to both create context and to eliminate construct-irrelevant variance from listening comprehension. If the participants select the *sincere* option, the platform takes them to the next video question; if they select the *sarcastic* option, it takes them to another item asking what makes them think that the utterance is sarcastic. Since the participants were not expected to have had formal instruction on pragmatics, or more specifically cues, they might not have been familiar with the terminology. Therefore, for the pretest, a short answer item was used asking the participants to explain the clues that they identified to detect sarcasm, even for the questions where the correct answer is sincere, to eliminate the chance of guessing because the platform allows the users to go back in the test. For the posttest, the participants were provided with the types of cues using multiple choice items.

The next two questions are about situational context and lexical cues. Because sarcasm is not always conveyed with intonation and facial expressions, this part aims to measure whether the participants know about inferring the sarcastic meaning from situational disparity or formulaic expressions. For both questions, a scenario is given and the response to the situation or the question is left blank. The test takers were asked to select an option from four options. Three of the options include sincere answers while the third one includes a sarcastic answer. For example, in the pretest the correct answer to the lexical cue question is: *Is the Pope a Catholic?*

which is one of the formulaic expressions that are used frequently by native speakers to imply that the answer to the question is indubitably yes. The correct answer to situational context question can only be inferred from situational disparity. Given that any utterance can be perceived as sarcastic with the right intonation, there was a possibility that test takers might have chosen a distractor as the sarcastic option. To ensure that test takers choose the sarcastic option, two measures were taken. First, they were told to choose the most appropriate sarcastic reply in the instructions. Second, a native speaker of American English was asked to record the sentences in the options without a change in intonation so that it would be easier for the test takers to notice that the other options are not sarcastic. The example below is a transcript from one of the recordings annotated to show prosodic stress:

PLEASE, keep talking. I always yawn when I am INTERESTED.

In this example, stress and intonation are typical of a non-sarcastic utterance. In a sarcastic utterance, it would be expected that *please* and *keep* would be nearly equally stressed. In addition, *always* would be stressed more than *yawn*.

The last two questions measure whether the participants know when it is appropriate to use sarcasm. For these last two questions, scenarios ending with a sarcastic reply are provided and the test takers are asked to choose one of the options: (a) appropriate, (b) somewhat appropriate, (c) inappropriate. Figure 2 shows a sample appropriateness question from the pretest.

Intervention

The experimental group received a 75-minute instruction on recognition of sarcasm immediately after the pretest while the control group did not receive any instruction. Three tasks

were used for the intervention: a spot-the-difference task, a consciousness-raising task, and a consensus-reaching task. Participants worked in dyads with a partner to complete all the tasks.

In the spot-the-different task, partners were given comics that were identical except for one modification. One learner would have the comic that had a sarcastic comment to an utterance or a situation, while the other would have the comic that had a sincere comment. In each comic, there was also a different situation that would result in a sarcastic or a sincere comment. The participants needed to work toward the goal which was to talk about the reason behind the difference in meaning in both comics without showing their comics to each other.

In the consciousness-raising task, participants watched three pairs of videos. The two videos in each set were identical except for the initial utterances (except for the last video, in which case a lexical cue was included). The replies to the utterances were the same, but the initial utterances and the contextual information determined whether the replies were sincere or sarcastic. For example, in the first pair, the person enters without knocking the door; therefore, the other speaker replies with a sarcastic tone: *Oh, hello Mike, it's open, come in.* In the second pair, the female participant is short, and when the other speaker says that her height will give their basketball team an advantage, it helps the listeners understand that she is sarcastic when she says: *THANKS Mike!* The prosodic stress is also a cue in this reply, which is annotated in the example. In the third pair, the use of Pope Q question is a clue that the speaker is being sarcastic. Participants needed to work with a partner to answer questions and to list the cues that speakers used to convey sarcasm. The videos used for this task were made by videotaping three colleagues who volunteered to participate in this section of the study.

The consensus- reaching task was an appropriateness task. To complete this task, partners worked together to decide under which conditions they would consider the use of sarcasm

appropriate or inappropriate. Then, they filled out a table, which included two variables: age and distance.

During each task, students first worked in pairs and the researcher walked around to make sure students understood the instructions and were on the task. After students completed each task, a whole-class discussion was conducted. After all the tasks were completed, the researcher provided explicit instruction on sarcasm using a PowerPoint presentation. The instruction included discussing what sarcasm means, why it is important to know about sarcasm and why it is difficult to recognize, the cues that can be used to convey and recognize sarcasm, and when and with whom it is appropriate to use sarcasm. The researcher concluded the instruction by asking students to reflect on their own experiences with sarcasm.

Results

Before the hypothesis testing, item analysis was conducted in order to assess the quality of the tests and test items. Two items with low *B*-index values in the pretest and the posttest were discarded due to poor item discrimination. After the item analysis, the instruments were checked for internal consistency by computing KR-20. Observed KR-20 value was 0.86 for the pretest and .80 for the posttest.

The QQ plot and the histograms showed that the pretest and posttest data were not normally distributed. Therefore, the Mann Whitney test was used to test for between group differences on the results of the pretest. No statistical difference was found between the experimental group and the control group (see Table 1). This indicated that the groups were equivalent at the time of the pretest.

Table 1

Mann Whitney Test for Comparing Groups on the Pretest

	Group	N	Mean Rank	Sum of Ranks
Pretest	Control	8	11.06	88.50
	Experimental	13	10.96	142.50
	Total	21		

Note. z_{crit} (2 tailed) = +/- 1.96; *p > 0.05; $z_{observed}$= -.037

The null hypothesis was the following:

- H_0: There is no difference between the experimental group's scores on the pretest and the posttest.

To test this hypothesis, a non-parametric test, Wilcoxon Signed Ranks test, was used because QQ plots and histograms showed that the data were not normally distributed. The result is statistically significant with a p value of 0.028; therefore, the null hypothesis is rejected (see Table 2). An eta-squared value of 0.40 shows a large effect size.

Table 2

Wilcoxon Signed Ranks Test for the Experimental Group on the Pretest and the Posttest

		N	Mean Rank	Sum of Ranks
Posttest - Pretest	Negative Ranks	1	11.00	11.00
	Positive Ranks	11	6.09	67.00
	Ties	1		
	Total	13		

Note. T_{crit} (N=13, 2 tailed) = 17; *p < 0.05; eta^2=.40

Another Wilcoxon Signed Ranks test was used to see if the control group improved between the pretest and the posttest. No statistical difference was found between the pretest and

the posttest scores of the control group (p = .216), which shows that the changes between the pre-and posttest scores of the experimental group are not attributable to test effect.

Relevance to PIE and Second Language Learning

Although there are limitations of this study, the results support previous studies indicating that sarcasm can and should be taught and be a part of second language instruction. This study is an important contribution to the literature on instructed pragmatics and sarcasm in particular because it is the first attempt to use an interaction approach and tasks to teach sarcasm. The results showed that sarcasm can and should be taught and be a part of second language instruction. Increased knowledge and awareness of sarcasm in students' second language can help them communicate and interact better outside of the classroom. The results of this study could be helpful for future research on second language learner sarcasm or teachers who may wish to teach their students about recognition of sarcasm.

There is no evidence supporting the efficacy of any single method over another. However, this study reveals that sarcasm is teachable in the second language classroom and that, furthermore, it can be taught using tasks. Task supported learning emphasizes engagement with meaningful and relevant tasks, which enables learners to create and negotiate meaning through interaction. It is up to teachers to modify these tasks, create different tasks or choose a different method when they teach sarcasm.

References

Bachman, L. & Palmer, A. (2010). *Language assessment in practice.* Oxford, UK: Oxford University Press.

Bardovi-Harlig, K. (2001). Evaluating the empirical evidence. In K. Rose & G. Kasper (eds.), *Pragmatics in language teaching*. (pp. 13-32). Cambridge, UK: Cambridge University Press.

Bouton, L. F. (1994). Conversational implicature in a second language: Learned slowly when not deliberately taught. *Journal of Pragmatics*, *22*(2), 157-167.

Bouton, L. F. (1999). Developing nonnative speaker skills in interpreting conversational implicatures in English. In E. Hinkel (ed.), *Culture in second language teaching and learning.* (pp. 47-70). Cambridge, UK: Cambridge University Press.

Ivanko, S. L., Pexman, P. M., & Olineck, K. M. (2004). How sarcastic are you? Individual differences and verbal irony. *Journal of language and social psychology*, *23*(3), 244-271.

Jorgensen, J. (1996). The functions of sarcastic irony in speech. *Journal of Pragmatics*, *26*(5), 613-634.

Kim, J. (2014). How Korean EFL learners understand sarcasm in L2 English. *Journal of Pragmatics*, *60*, 193-206.

Kim, J., & Lantolf, J. P. (2016). Developing conceptual understanding of sarcasm in L2 English through explicit instruction. *Language Teaching Research*, 1-22.

Kreuz, R. J. (2000). The production and processing of verbal irony. *Metaphor and Symbol*, *15*(1-2), 99-107.

Marcello, P. J. (2012). *Navigating Sarcasm as one Key to American Belonging: A Study of the Value of Sarcasm in America.* Unpublished manuscript, Communication Studies,

University of Portland, Oregon, the United States.

Peters, S., Wilson, K., Boiteau, T. W., Gelormini-Lezama, C., & Almor, A. (2016). Do you hear it now? A native advantage for sarcasm processing. *Bilingualism: Language and Cognition*, *19*, 400-414.

Pexman, P. M., & Olineck, K. M. (2002). Understanding Irony How Do Stereotypes Cue Speaker Intent?. *Journal of Language and Social Psychology*, *21*, 245-274.

Slugoski, B. R., & Turnbull, W. (1988). Cruel to be kind and kind to be cruel: Sarcasm, banter and social relations. *Journal of Language and Social Psychology*, *7*(2), 101-121.

Takahashi, S. (2010). Assessing learnability in second language pragmatics. In A. Trosborg (ed.), *Handbook of pragmatics* (vol.7, pp. 391-421). Berlin: Mouton de Gruyter.

Tepperman, J., Traum, D. R., & Narayanan, S. (2006). " Yeah right": sarcasm recognition for spoken dialogue systems. *Proceedings of INTERSPEECH and 9th International Conference on Spoken Language Processing, USA*, *4*, 1838-1841.