FACTORS INFLUENCING THE COMPREHENSION OF CONVERSATIONAL IMPLICATURES BY NATIVE AND NON-NATIVE SPEAKERS OF ENGLISH: AN EMPIRICAL STUDY INSPIRED BY BOUTON'S (1988)



Alisa-Anastasiia Kavetska

ORCID: 0000-0002-1626-0574

Jagiellonian University

Abstract

The main goal of the present study has been to examine implicature comprehension in native and foreign/second language speakers of English from different linguistic backgrounds. The project was inspired by an earlier work of Bouton (1988), whose objective was to measure the influence of cultural background on the ability to grasp implied meanings in English, by comparing native and non-native speakers' performance. A modified digital version of the original multiple-choice test (Bouton 1988) was used to collect the data. Gricean (1989) theory of conversational implicature served as a theoretical framework for the study. The quantitative analysis of the data collected from the speakers of 33 languages was compared against the original results and the scope of the analysis was expanded to incorporate the examination of other factors affecting implicature understanding in native and non-native languages. The present results corroborate some of the earlier findings and suggest that language competence and cultural background are crucial factors in understanding implicated meanings.

Key words

conversational implicature, implicature comprehension, L2 pragmatic competence, Grice, intercultural communication, conversational maxims

Introduction

In everyday conversations speakers often prefer to express their thoughts in an indirect way for the purposes of achieving certain communicative effects, as well as out of politeness considerations. Thus, it is often the case that the meaning of what is being communicated by linguistic stimuli in context goes beyond what the words used in a particular sequence conventionally convey. According to a philosopher of

language Paul Grice (1975), getting the speaker meaning calls for inference in addition to mere decoding. The meaning obtained via inferential reasoning is known as *implicature*, the cornerstone concept for the present study.

While it used to be assumed that certain mechanisms of implicature production and derivation are universal in nature and are shared by all people regardless of the language they speak, studies by Keenan (1976) and Bouton (1988) have shown that the way implied meaning is conveyed often seems to be defined by certain cultural and linguistic norms of a community. Therefore, in the cases of intercultural communicative exchanges, communicating implicit import might create problems and implicatures could sometimes not get through as intended, which might lead to misunderstandings.

One of the pioneering studies on implicature comprehension by people from various cultural backgrounds was conducted in 1988 by Bouton. The results revealed significant differences in understanding implicatures between native and non-native speakers of English, which was ascribed to the influence of cultural differences. The author, however, did not analyse some other probable factors affecting the ability to comprehend implicated meaning, for instance the impact of L2 proficiency level.

The main goal of the present study (which constitutes a part of the unpublished MA thesis by Kavetska, 2020) has been to examine implicature comprehension by non-native speakers of English from different L1 backgrounds and analyse various factors which influence the understanding of implied meanings. The project was inspired by the earlier work of Bouton (1988): a modified version of the original multiple-choice test was used to collect the data. The scope of the study was expanded by involving participants from many more linguistic backgrounds than in the original research. Additionally, the test was translated into German and administered to a small group of German native speakers to measure the success rate of implicature comprehension in L1 against L2.

1. Theoretical basis of the study

The term *implicature* was coined by Grice (1975) in an attempt to account for the fact that speakers often communicate more than the conventional linguistic meaning of the sentence used. On his construal, speakers are taken to be rational agents trying to make their contributions appropriate to the conversation in which they are engaged (Gricean co-operative principle). Implicatures are generated when conversational maxims (defined as communication standards related to Quality, Quantity, Relevance and Manner, see Grice 1975), are blatantly flouted: recipients then infer the speaker-intended meaning from the general principles (maxims) of

communication and co-operation and the non-linguistic features of a given communicative situation (Grice 1989)¹.

Inferential reasoning employed in implicature comprehension is believed to be a universal skill, and pragmatic inferencing in L2 is assumed to proceed essentially in the same way as in L1 (Foster-Cohen 2000). However, a number of studies in second language pragmatics reveal that certain social and cultural factors influence L2 pragmatic competence and frame certain aspects of speakers' communicative behaviour (e.g. Carrell 1979; Taguchi 2005; Taguchi et al. 2013; Roever et al. 2014; Taguchi & Kim 2018). It has also been shown that cultural background impacts implicature processing in L2 (Bouton 1988, 1992). The pioneering investigation into implicature comprehension by non-native speakers of English, which inspired the present research, was conducted by Bouton (1988).

2. Bouton's (1988) study

Bouton's (1988) original observation was that misunderstandings that arise in intercultural communicative contexts are frequently caused by differences in the perception of the world and discourse norms of the participants with different L1 backgrounds. These can lead to a failure in deriving the speaker-intended meaning, especially when an implicature is involved. In his 1988 paper Bouton refers to Keenan's (1976) findings, which motivated his research. Keenan (1976) had observed that in Malagasy society (an ethnic group on Madagascar), participants of a conversation are not expected to adhere to the maxim of Quantity, "make your contribution as informative as is required (for the current purposes of the exchange)" (Grice 1975: 45) and often "provide less information than is required by their conversational partner, even though they have access to the necessary information" (Keenan 1976: 70). For instance, when asked about the whereabouts of one's mother. a Malagasy can reply that she is either at home or at the market, which will be taken by a western audience to implicate that the speaker lacks exact information. However, this implicature is not actually generated by Malagasians, as the expectation of the speaker's being as informative as needed is not a Malagasy norm. Thus, Bouton (1988) reached a conclusion that misunderstandings that arise in intercultural communicative contexts are frequently caused by differences in the perception of social functions and discourse norms of the participants with different L1 backgrounds and set out to examine the extent to which cultural background affects the ability to understand conversational implicatures.

¹ For a more detailed account of implicature theory, see Levinson 1983; Levinson 2000; Thomas 1995; Wharton 2002; Potts 2005; Huang 2014; Zufferey et al. 2019. A different perspective on implicature, which cannot be dealt with here as it goes beyond the scope of the present paper, is offered in relevance theory, see Sperber & Wilson 1986; Jodłowiec 2015; Yus 1999; Padilla-Cruz 2013.

In order to investigate implicatures in cross-cultural communicative contexts, Bouton (1988) designed a multiple-choice implicature comprehension test. In the initial stage of the test development, a series of situations in which an interlocutor conveys a message through a conversational implicature based on flouting one of the Gricean maxims were given to native speakers of American English (NSs) and a group of non-native English speakers (NNSs). Each scenario was followed by a question about the implicature, asking the participants to explain what was meant. The most popular interpretations provided by NSs became the *expected response* in the multiple-choice test, with distractors based on the most frequent NNSs' responses.

Below is an example item from the test, based on the violation of the Relevance maxim:

(1) Two roommates are talking. David has just been talking on the telephone to a woman that he was going to take to see a play.

David: Darn it! Mandy just broke our date for the play. Now I've got two tickets for Saturday night and no one to go with.

Mark: Hey, David. Have you ever met my sister? She's coming down to see me this weekend. David: No, I don't think so. Why?

What was Mark's reason for mentioning that his sister was coming?

- (a) Mark is just thinking ahead to the weekend and can't remember whether David has met his sister or not. (Literal interpretation)
- (b) There is nothing Mark can do to help his friend, so he is mentioning a problem of his own.
- (c) Mark is suggesting that David take Mark's sister to the play. (Expected interpretation.)
- (d) Mark wants to be sure that David knows that the woman he is with this weekend is his sister and not a new girlfriend.

The test consisting of 33 items was compiled and administered to 436 NNSs, all international students entering a US university, whose competence in English was homogeneous and corresponded roughly to B2 level as measured by the TOEFL test. Six cultural groups were represented: Germans, Spanish/Portuguese, Taiwan Chinese, Mainland Chinese, Koreans, and Japanese. The NS group comprised 28 Americans.

Having conducted the quantitative and qualitative analyses of the data, Bouton (1988) concludes that there are considerable differences in NSs' and NNSs' interpretations of implicatures, as well as variation among the different cultural groups involved. He notes that the extent to which failure in detecting implicated message by NNSs is attributable to cultural background rather than insufficient language proficiency needs further investigation. Another question left unanswered is whether non-American NSs of English (the British, Canadians, Australians, etc.) would all interpret implicatures in the same way, i.e. whether there is "a cultural heritage common to English NSs in various parts of the world" (Bouton 1988: 195). An attempt to resolve these issues, as well as to partially replicate the original study, expanding the scope of analysis by involving a more varied pool of participants and

investigating the influence of some other factors on implicature comprehension, were the main incentives for the present research.

3. A cross-cultural study on implicature comprehension: 30 years after Bouton

3.1. Method, data collection and participants

The original multiple-choice instrument had to be modified for the purposes of the present study, partially due to practical reasons, as Bouton's (1988) original test is not accessible in its full version: only 12 original test items could be found in Bouton's work². Five more scenarios (modelled on the retrieved items) were added to balance the distribution of the various types of implicatures. They were: an item involving understated negative evaluation (which will be explained in some detail below), infringing the maxim of Quantity, two items comprising ironic implicatures based on flouting the Quality maxim, one communicative situation involving an implicature arising from flouting the maxim of Manner and one based on flouting Relevance.

The test consisted of 17 items focused on implicatures and 3 extra added as distractors, so altogether there were 20 items to be responded to in addition to an initial section on demographic information: age, gender, L1, the experience of living in an English-speaking country, field of education/occupation. The maximum score was 17.

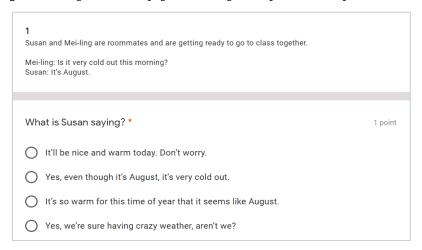
The study was conducted digitally: the link to the test hosted on a Google forms platform was sent directly to each prospective respondent (accessed via the author's personal social network). The potential participants were selected based on their proficiency level: only native speakers of English and those with the command of English at least B2 CEFR level (self-assessed) were asked to take the test. The aim was to get as many cultural backgrounds represented as possible.

161 participants: 139 NNSs, representing 30 different L1 backgrounds and three (self-assessed) proficiency levels – B2, C1, C2; and 22 NSs from different English-speaking countries took part in the test as volunteers. Most of the respondents were international students based in Germany in the academic year 2019-2020. The ages ranged between 18 and 36 years, and the respondents came from various educational and occupational fields, from Electrical Engineering to Philosophy. Additionally, a group of 26 German native speakers took the German version of the test (see 3.2.3) in order to compare their scores in L2 and native language.

Here is a page from the test:

² The original text published in *World Englishness* does not include the full test battery and, to the best of my knowledge, it is not available in any other printed source. The author is no longer alive, so I could not access the original multiple-choice instrument.

Fig. 1: The design of the webpage containing the implicature comprehension test



It was estimated that the questionnaire would take approximately 15 minutes to fill out. An internet-based format made it possible to create a visually appealing test layout, as well as fast and easy test distribution. Digital record of the responses also meant that the quantitative analysis could be conducted relatively easily. On the downside, since the test was anonymous and there was no need for the subjects to send their responses back to me individually, several persons seem to have chosen the options at random, possibly without reading the questions, as their scores looked unrealistically low. These scores were disregarded as unreliable.

In order to establish possible cross-cultural differences in interpreting implicatures, the participants were grouped into 7 cultural clusters:

Table 1: Cultural groups based on participants' L1

Cultural group	Nº of participants	L1 language		
Slavic	55	Russian, Ukrainian, Polish, Czech, Slovak, Slovene, Bulgarian, Macedonian		
Chinese	7	Chinese, Mandarin, Cantonese		
Desi	19	Hindi, Punjabi, Urdu, Malayalam, Tamil, and Assamese		
German	21	German		
Roman	24	Spanish, Catalonian, Italian, Portuguese, Romanian, and French		
NSs	22	British, American, New Zealand and Australian Englishes		
Others	13	Albanian, Hebrew, Norwegian, Turkish, Swedish, Dutch – too few in number for a distinct group to be created		

3.2. Data analysis and discussion of the results

3.2.1. NNSs' vs NSs' performance

On average, the NNSs scored lower, with the mean success rate of 76%, than NSs (84%), although the difference is much smaller than in Bouton's (1988) study, where the proportions of successful answers were 62% and 85%, respectively.

The difference between Bouton's (1988) and present results can be attributed to the fact that, unlike in Bouton's study, where the NNSs' level was B2, the majority of my participants assessed their level in English as C1 (58 respondents) or C2 (71 respondents). Only 28 respondents in the present study marked their level in English as B2. The average test scores of the participants with different English proficiency levels are represented in the table below.

Table 2: The average results (raw and as a percentage) on the implicature understanding test for native and non-native speakers of English with different proficiency levels in Bouton's and present studies

Level	Present results: Average score (out of 17)	Bouton's results: Average score (out of 33)	Present results: % of correct answers	Bouton's results: % of correct answers
B2	12.39	20.75	72.89	62.8
C1	13.22		77.79	
C2	13.60		80.03	
NSs	14.38	28.25	84.56	85.6

The obtained results suggest that L2 proficiency level does influence the ability to comprehend an implicated message, with a threshold at C1 level, where the difference between native and non-native speakers' ability to interpret implicatures becomes negligible. This is consistent with Taguchi's at al. (2013) and Roever's (2005) conclusions. As Zufferey et al. (2019: 203) hypothesise, the problems of lower-level English users with identifying implicated meanings may sometimes stem from the fact that, unable to see the significance of a certain explicit content in context, they assume that their L2 competence is insufficient, so they give up and do not engage in the inferential reasoning needed to get the implicature.

Additionally, many of the present study respondents reported having lived in an English-speaking country, whereas Bouton's NNSs had only entered the USwhen his research was conducted. Although this issue needs further investigation, the present data align with Bouton's later findings (1992) that the experience of living in an English-speaking country and frequent contact with NSs improve the ability to interpret implicatures.

3.2.2. The most challenging implicatures for different cultural groups

The percentage distribution of successful (i.e. *expected*) responses across the different cultural groups is presented below. The scores were grouped based on the maxim flouted, with some subtypes revealing interesting interpretation tendencies selected for further analysis.

Table 3: The proportions of successful answers to the items involving different types of conversational implicatures across seven cultural clusters [%]

Implicature type	Germ	Slav	Desi	Chin	Rom	Other	NSs	Overall
1. Quantity	82.76	75.41	30.00	71.43	69.23	57.14	79.17	69.61
1.1. Understated negative evaluation	68.97	63.93	43.33	57.14	61.64	57.14	65.28	61.51
2. Quality	100.0	98.36	75.00	100.0	92.31	100.0	100.0	95.58
2.1. Irony	87.36	79.78	51.67	71.43	79.49	76.19	76.39	76.80
3. Manner	82.76	78.69	72.50	85.71	78.85	85.71	91.67	81.77
4. Relevance	90.80	85.79	68.33	76.19	82.69	79.76	91.67	84.16
4.1. Pope Q	100.0	90.16	65.00	71.43	96.15	100.0	100.0	91.16
Overall test score	86.41	80.42	59.41	73.95	78.51	76.89	84.56	

In general, implicatures based on flouting the Quantity maxim caused most problems (31% of misinterpretations across the whole sample). In this category, recovering implicatures involving "understated negative evaluation" (1.1 in the table) proved to be the most challenging, even for NSs. This type of implicature arises in situations when somebody is asked for their opinion about something, and the person avoids direct criticism by commenting on the features that are totally insignificant for the evaluated object. Failing to provide the requested information implicates a negative opinion. Following Bouton's (1988) approach, it is classified here as related to the maxim of Quantity, even though it can be viewed as infringing Relevance just as well.

An example scenario used in a test item follows:

(2) Two women are at a fashionable party. They are wearing beautiful long dresses and expensive dress shoes.

Chloe: Wow, Jane. I love your shoes! They're wonderful. What do you think of mine? Jane: They look comfortable.

Two more communicative situations used in the test relied on this kind of processing. Below is the most challenging item in the test with the distribution of answers chosen across all groups.

(3) Two teachers are talking about a student's term paper.

Mr Ranger: Have you read Mark's term paper on modern pirates?

Mr Ryan: Yes. I read it last night.

Mr Ranger: What did you think of Mark's term paper?

Mr Ryan: I thought it was well typed. How did Mr. Ryan like Mark's term paper?

Table 4: The percentages of participants in different cultural groups opting for different interpretations of the understated criticism test item [%]

	Germ	Slav	Desi	Chin	Rom	Other	NSs
(a) He liked the paper: he thought it was good.	13.79	19.67	25.00	0.00	15.38	50.00	16.67
(b) He thought it was certainly well typed.	20.69	4.92	35.00	0.00	11.54	0.07	16.67
(c) He thought it was a good paper; he did like the form, though not the content.	27.59	42.62	25.00	42.86	42.31	14.29	29.17
>> (d) He didn't like it.	37.93	32.79	15.00	57.14	30.77	35.71	45.83

As can be seen, one of the most popular distractors to be chosen was (c), in which, although acknowledging that Mr. Ryan did not like the content of the student's term paper, the respondents assumed that he nevertheless liked the paper, evidently failing to discern the criticism. It is worth noting that the percentage of respondents opting for the (downright inappropriate) literal interpretation in the two items was the highest among the Desi group, who had major problems also with getting irony.

Another communicative scenario in this category was based on a famous Gricean example of the reference letter for a philosophy position candidate, whose regular attendance in class and good command of English are listed as the applicant's outstanding qualities, manifestly implicating that he is not suitable for a job in academia. Overall, about 59% of the NNSs and 60% of the NSs did well on the items involving understated negative evaluation in the present study. In contrast, just above 75% of the NSs and only 53% of the NNSs got the expected interpretation in Bouton's study (1988: 189). The low success rate can be explained by taking into account that, possibly, these implicatures call not only for a good grasp of pragmatic norms, but also rely on specific knowledge of the academic culture. In other words,

the recipients might simply not know what makes a good term paper and what information reference letters should provide. In order to check this conjecture, the answers given by the respondents with the background in philosophy (17 participants) were compared against the responses given by all the other participants. The results clearly suggest a connection between studying philosophy and being able to grasp indirect criticism in the Gricean scenario. Importantly, no major discrepancies were established between the answers of those who studied philosophyand other respondents' answers on all the remaining test items, which excludes the probability of attributing higher rates of the successful answers on the items in question to the higher overall score and better implicature-reading capacity of philosophy majors.

Table 5: Success rates for the items involving understated negative evaluation, with scenarios related to knowledge of the academic context

	Item № 4	Item Nº 11
Respondents with philosophy background	64.71%	94.12%
Respondents from all the other fields	31.10%	67.07%

The next in the lowest success rate ranking is the ironic implicature (a subtype of the Quality maxim flouting), with 73% of NSs and 76% of NNSs reaching the expected interpretation. The fact that the success rate on these items was rather poor both for NSs and NNSs might indicate that certain instances of implicit import are challenging for comprehension per se. Processing irony, in particular, poses a cognitive challenge to language users, as it heavily depends on context and involves several layers of inference and theory of mind reconstruction (Noveck 2018), so the (relatively) low results obtained for NSs and NNSs are not unexpected. Notably, the German group's awareness of irony appears to be higher than average. After all, comedy is said to be a staple of the German culture, with satire and irony contributing in an important way to creating German identity in the 20th century (Twark 2007).

The most accessible type of conversational implicature for the majority of participants was the pope question, a culture-specific violation of the maxim of Relation (Taguchi 2013). This is a kind of formulaic implicature which arises when instead of providing a relevant answer to a given question, the speaker produces a question that asks about an obvious fact (like, "Is the Pope catholic?"). Although most respondents did not have issues with the test items involving this type of implicature, it is noticeable that the Chinese (71% of successful responses) and Desi (65%) groups scored lower than others on the item involving the classic pope question. This reinforces the previously established findings (Roever 2004) that this type of indirect message is highly formulaic and calls for culture-specific knowledge. It is not

surprising, then, that the respondents from non-Christian cultures had difficulty deriving the intended implicated meaning of the question "Is pope catholic?". This provides obvious evidence that the use of implicature can lead to communication breakdown in intercultural exchanges.

As far as cross-cultural differences are concerned, the present results show that the Desi group has strikingly low scores, especially on the items involving irony and understated negative evaluation, with only 49% of success rate in understanding implied irony. Within this cultural group, the percentage of respondents opting for the literal interpretation across all test items was the highest. English is the second native language for these people (as it is the official language in their countries of origin), which suggests that the difficulties are not related to L2 proficiency but arise due to other problems. It might be suggested that the kind of indirectness that implicatures employ contrasts with communication norms of candidness important for these speech communities. Perhaps people from this culture tend to be more straightforward in conveying messages and are not "ironically inclined" (Wilson, in Noveck 2018: 172), which is consistent with my observations from personal interactions with the speakers of Indian languages.

By contrast, the Germans come first in the NNSs ranking and their high scores motivated a further investigation whether the results would be different if the test was taken in a native language. In a follow-up pilot study, the test was translated into German and administered to 26 native speakers of German (the sample differed from the one taking part in the main study).

Table 6: Percentages of successful responses to test items containing different types of implicatures within the two groups of German-speaking participants who took the test in English and German [%]

Implicature type	Germans who took the English test	Germans who took the German version of the test		
1. Quantity	82.76	38.4		
1.1. Understated negative evaluation	68.97	75.0		
2. Quality	100.0	100.0		
2.1. Irony	87.36	66.6		
3. Manner	82.76	98.0		
4. Relevance	90.80	85.2		
4.1. Pope Q	100.0	100.0		
Overall test score	86.41	78.4		

The findings are a bit surprising as the respondents who took the test in the native language scored unexpectedly worse than those who took the test in English (with the exception of recovering the Manner implicatures). However, this may be attributed to the fact that the participants from two groups came from very diverse backgrounds. This might tentatively indicate that there are more factors to be considered when calculating a hearer's ability to comprehend implicatures, and further research is needed.

3.2.3. The influence of living in an English-speaking country

The analysis of the scores of the respondents with and without the experience of living in an English-speaking country also did not show many strong dependencies. This might be attributed to the fact that the majority of the participants, living in an international environment, use English as the lingua franca on a daily basis, and are in frequent contact with native English speakers. The only category of implicature which was identified by non-native speakers who lived in an English-speaking country with a much higher success rate than by those who did not have such an experience was understated negative evaluation. It seems that certain types of indirect meaning comprehension can be acquired via the contact with the target language culture and native speakers.

Table 7: The average proportion of successful responses given to the items containing understated negative evaluation by non-native speakers of English with and without the experience of living in an English-speaking country

	Score for UNE items (%)
Respondents who lived in an English-speaking country	68
Respondents who never lived in an English-speaking country	49

Conclusion

Generally, the analysis of the data collected in the internet-based multiple-choice implicature comprehension test in 2019-2020 confirms Bouton's (1988) earlier diagnosis that speakers from different cultural backgrounds, especially those from the so-called "remote cultures", tend to interpret implicatures in English differently. The present results also indicate that target language proficiency may be an important factor affecting L2 implicature comprehension, with the performance of NNSs at C1 and C2 levels of English proficiency resembling very closely that of NSs. This provides a tentative answer to Bouton's question about the impact of L2 competence on implicature comprehension, but of course further research embracing a larger number of NNSs with native-like proficiency is required. As far as

the processing difficulty for different types of implicature is concerned, understated negative evaluation proved to be the most challenging for all the respondents, both in the original and the present study. This might be attributed to the inherent complexity of this type of indirect message in general, and the fact that in the scenarios used in the test, the interpretation relied on specific type of background knowledge that recipients might simply lack. More neutral scenarios, with implicature generation not dependent on familiarity with specific circumstances (like the academic milieu), should be used in the test, as it is emphasised below.

Unfortunately, a small number of NSs participants, i.e. L1 users of British, American, Australian, and New Zealand English, does not allow for any viable conclusions on possible differences across the groups, but it can be noted that no substantial variation in the responses was found. The homogeneity of interpretations within the NSs group (tentatively) indicates that native English speakers from different parts of the world do seem to share "a common cultural heritage" (Bouton 1988: 195).

The present study suffers from some limitations, the major of which has to do with the small number of representatives from different cultural backgrounds. Future research should mainly focus on speakers from non-western cultures and on the types of implicature identified as most demanding. In addition, the scope of the analysis could be widened in the future: for instance, it might be interesting to compare the responses of the participants involved in different fields of study to investigate whether the students of, say, Linguistics and Literature departments are better at understanding implicated message than the students of Engineering.

Other limitations are related to Bouton's multiple-choice test design, as well as the scenarios chosen for the test. As had been argued by Zufferey et al. (2019), different types of conversational implicatures are represented in the test disproportionally, i.e. some categories contained more items than others. It is also worth noting that, as pointed out above, the situational scenarios should demand as little specific knowledge as possible, since, for instance, the classical pope question and Grice's academic cases may not be equally accessible to everyone. Last but not least, implicature production processes in L2 speakers remain unaddressed and they also need to be researched.

Importantly, examining implicature comprehension in L2 has some valuable practical applications for SLA researchers and language teachers. The insight into the challenges that comprehension of certain types of conversational implicature poses provides an important indication as to what the language teacher should particularly focus on in EFL/ESL instruction in order to help language learners overcome potential hurdles that the use of implicatures poses in communication with native speakers of English, as well as in the situations of international communication in which English is used as the Lingua Franca. Certain kinds of implicature that persons from particular cultural backgrounds are unfamiliar with can be taught directly in the classroom just as other areas of language competence.

The established connection between cultural background and the ability to arrive at the speaker-intended implicated meaning the way native speakers do suggests that teaching target cultural aspects should necessarily be incorporated in the language teaching syllabus (Bouton 1994).

References

Bouton, Lawrence. 1988. "A cross-cultural study of ability to interpret implicatures in English". *World Englishness*, 7: 183–196.

Bouton, Lawrence. 1992. "The interpretation of implicature in English by NNS: Does it come automatically without being explicitly taught?" In *Pragmatics and Language Learning 3*, edited by L. Bouton & Y. Kachru, 53–65.

Bouton, Lawrence. 1994. "Conversational implicature in a second language: Learned slowly when not deliberately taught. Journal of Pragmatics 22 (2), 157–167.

Carrell, Patricia. 1979. Indirect speech acts in ESL: Indirect answers. In On TESOL '79: The Learner in Focus, edited by C. A. Yorio, K. Perkins and J. Schachter, 297–307.

Carston, Robyn. 2002. Thoughts and utterances. The pragmatics of explicit communication. Malden, MA: Blackwell.

Cohen, Andrew D. 2008. "Teaching and assessing L2 pragmatics: What can we expect from learners?" *Language Teaching* 41 (2), 213-235.

Foster-Cohen, Susan. 2000. Review article: D. Sperber & D. Wilson (1986: 1995). *Relevance: Communication and Cognition. Second Language Research* 16 (1), 77–92.

Grice, Herbert Paul. 1975. Logic and conversation. In *Syntax and Semantics*, vol. 3: *Speech Acts*, edited by P. Cole and J. Morgan. New York: Academic Press, 41–58.

Grice, Herbert Paul. 1989. Studies in the Way of Words. Harvard University Press, Cambridge MA.

Huang, Yan. 2014. Pragmatics. Oxford: Oxford University Press.

Jodłowiec, Maria. 2015. The challenges of explicit and implicit communication: A relevance-theoretic approach. Frankfurt am Main: Peter Lang.

Kasper, Gabriele and Blum-Kulka, Shoshana. 1993. *Interlanguage pragmatics*. Oxford: Oxford University Press.

Kavetska, Alisa-Anastasiia. 2020. *Understanding conversational implicatures by native and non-native speakers of English: An empirical study inspired by Bouton (1988).* Unpublished MA thesis. Jagiellonian University, Kraków.

Kecskes, Istvan. 2021. "Processing implicatures in English as a Lingua Franca communication". *Lingua* 256.

Kecskes, Istvan and Horn, Laurence. 2007. Explorations in pragmatics. Linguistic, cognitive and intercultural aspects. Berlin: De Gruyter Mouton.

Keenan, Eleanor. 1976. "The universality of conversational postulates". *Language and Society* 5, 67–80.

Levinson, Stephen. 1983. Pragmatics. Cambridge: Cambridge University Press.

Levinson, Stephen. 2000. *Presumptive meanings: The theory of generalized conversational implicature*. Cambridge, MA: MIT Press.

Levinson, Stephen. 1995. "Three levels of meaning". In *Grammar and meaning: Essays in honor of Sir John Lyons*, edited by Frank R. Palmer, 90–115. Cambridge: Cambridge University Press.

Noveck, Ira. 2018. *Experimental Pragmatics: The Making of a Cognitive Science*. Cambridge: Cambridge University Press.

Padilla Cruz, Manuel. 2013. "Understanding and overcoming pragmatic failure in intercultural communication: From focus on speakers to focus on hearers." *IRAL* 51 (1): 23–54.

Platt, John. 1979. "Variation and implicational relationships: Copula realization in Singapore English". *General Linguistics* 19 (1): 1–14.

Potts, Christopher. 2005. The Logic of conventional implicatures. Oxford: Oxford University Press.

Roever, Carsten. 2005. Testing ESL Pragmatics. Frankfurt: Peter Lang.

Rose, Kenneth R. and Kasper, Gabriele. 1999. "Pragmatics and SLA". *Annual Review of Applied Linguistics*, 19: 81-104.

Sadock, Jerrold M. 1978. "On testing for conversational implicature." In *Syntax and Semantics* 9, edited by P. Cole, 281–297. New York: Academic Press.

Saul, Jennifer. 2002. "Speaker Meaning, What is Said, and What is Implicated". *NOUS* 36 (2): 228–248.

Taguchi, Naoko. 2005. "Comprehending implied meaning in English as a second language". *Modern Language Journal*, 89: 543–562.

Taguchi, Naoko. 2011. "Do proficiency and study-abroad experience affect speech act production? Analysis of appropriateness, accuracy and fluency". *International Review of Applied Linguistics in Language Teaching*, 49: 265–293.

Taguchi, Naoko, Li, Shuai, & Liu, Yan. 2013. "Comprehension of conversational implicature in L2 Chinese." *Pragmatics and Cognition*, 21: 139–157.

Taguchi, Naoko and Kim, Yougin. 2018. *Task-Based Approaches to Teaching and Assessing Pragmatics*. Amsterdam: John Benjamins.

Thomas, Jenny. 1995. Meaning in interaction: An introduction to pragmatics. New York: Routledge.

Twark, Jill. 2007. *Humor, Satire, and Identity: Eastern German Literature in the 1990s.* Berlin: Walter de Gruyter.

Wharton, Tim. 2002. "Paul Grice, saying and meaning." *UCL Working Papers in Linguistics*, 14: 207–248.

Yus, Francisco. 1999. "Misunderstandings and explicit/implicit communication". Pragmatics 9 (4).

Zufferey, Sandrine, Moeschler, Jacques & Reboul, Anne. 2019. *Implicatures.* Cambridge: Cambridge University Press.