‘That sounds FINE.’: Predicting the Discrepancy in Politeness Perceptions of Online Messages between Native and Non-Native English Speakers

Abstract

We investigate the linguistic patterns of the online message that could introduce the pragmatic misunderstandings in the judgement of politeness between native and non-native English speakers. We collected politeness ratings of 600 online messages from both native English and Chinese speakers. By identifying the messages with disparate politeness judgements, we found that colloquial expressions might contribute to varying politeness perceptions. Our findings inform our computational model to detect potential cross-lingual communication breakdowns. (72 words)

Keyword

Politeness; misunderstanding; Cross-lingual Communication; Cross-cultural Pragmatic Failures

Introduction

"Cross-cultural pragmatic failures" are rooted in the disparities between the intended meaning of a message and its interpretation by the speakers from different linguistic and cultural backgrounds (Thomas, 1983). Pragmatic norms such as politeness are socially conventionalized within a speech community. Thus, individuals from different linguistic backgrounds (non-native speaker: NNS) may experience challenges when trying to convey their intended meaning to native speakers (NS) and when trying to figure out the intended meaning of messages by NS (Thomas, 1983; Cruz et al., 2013). If this misalignment between intention and interpretation between NS and NNS is not recognized and addressed properly, it can lead to negative consequences such as communication breakdown and stereotyping (Thomas, 1983). This tendency can be worse in online communication as there are fewer shared visual and physical cues to intended meaning.

Previous studies have suggested language models to evaluate pragmatic aspects of language such as politeness, sarcasm, directness. However, these studies usually target a single language community (e.g., Bamman et al., 2015). There is less attention to constructing linguistic models that can predict (mis)understandings of intended meaning between people from different linguistic backgrounds. A model that can detect messages with high chance of cross-cultural pragmatic misunderstanding could benefit future online cross-lingual communication, for example by triggering clarifications to prevent the potential communication breakdowns. In this study, we investigate the linguistic features of online messages that are more likely to be misunderstood between NS and NNS, with the goal of informing the development of a linguistic prediction model.

Method

To identify the disparities in the politeness perceptions between NS and NNS, we randomly selected 600 messages from the Stanford Politeness Corpus that contains more than10,000 requests occurring in online communities (Danescu-Niculescu-Mizil et al., 2013). Next, we asked participants whose native language was either English(EN) or Chinese(CH) to rate the perceived politeness of these messages on a scale from very impolite (-12) to very polite (12). All messages were given in English without any translation via an online survey platform (Figure 1). We collected 8042 ratings for 600 messages from 31 English speakers and 19 Chinese speakers. On average, each message gained 7 ratings from English speakers and 6 ratings from Chinese speakers.

In analyzing the data, we aggregated the ratings and calculated the averages of politeness ratings by English speakers and Chinese speakers per each message.

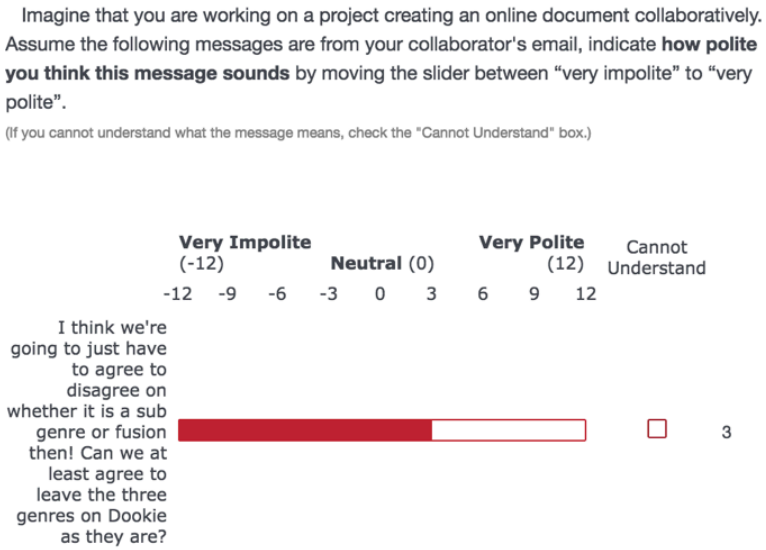

Figure 1 Example of the message politeness rating survey

Findings

There was a significant positive correlation between English and Chinese average ratings ($r = .79$, $p < .001$), which indicated that there were shared perceptions in judging the politeness of messages between NS and NNS. However, a number of messages were viewed generally politely by Chinese speakers (average rating > 0) but impolitely by English speakers (average rating < 0), and vice versa. The politeness ratings of more than 25% of the messages (152 out of 600 messages) were contradictory. Here are some example sentences that showed disparities in judgements:

> *So how come he can have all types of slanderous links on his wiki page? Don't you think being an admin you should delete them?* (EN mean: - 4.6, CH mean: 2.6)

> *Unfortunately, I have no clue what you mean. Can you point me to a page that has such a feature?* (EN mean: 1.1, CH mean: - 4.6)

To systematically explore where and why such differences in perception occurred, we re-sorted the messages and ratings by some politeness/impoliteness strategies that each message contained (Table 1). As shown in Figure 2, we could see that for some strategies such as 'Factuality' or 'Please' were more likely to be interpreted differently than other strategies such as 'Deference' or 'Gratitude'.

Strategy	Example
Direct question	**What is** your native language?
Factuality	**In fact** you did link,...
Please	Could you **please** say more?
Hedging	I **suggest** we start with ...
Counterfactual	**Could/Would** you ...
Deference	**Nice work** so far on your rewrite

Table 1 Politeness/Impoliteness strategies with examples

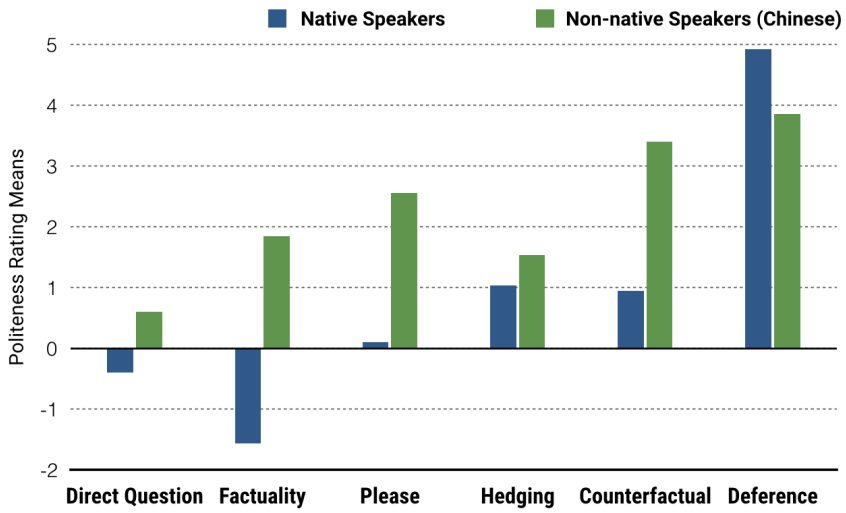

Table 2 Difference in perceived politeness of selected politeness strategies between native and non-native speaker

We further investigated the message sentences with disparate perceptions qualitatively and characterized some interesting common patterns that might contribute to creating the misalignments in intention and interpretation.

Language consist of its specialized convention such as lexical entries, grammatical rules, and conventions of uses and perspectives such that define the regularities shared within a community (Clark, 1996). We noticed that the colloquial uses of some expressions and words could introduce some different politeness perceptions between NS and NNS. For example, while formally, `please' is a marker of politeness (the sense most familiar to non-native speakers), colloquially it is often used as a strategy for formulating very direct requests (e.g., "Please explain why?", "Would you please stop?"), which can make the politeness marker itself seem insincere or even sarcastic. Also, "fine" often connotes "something unsatisfactory" which is the opposite meaning of "fine" in the dictionary. Between NSs who share the connotation, the following message was perceived moderately impolite while Chinese participants perceived it as moderately polite.

*That **sounds fine**, but why would you want somebody who knows nothing about the show to write them? If you are informed about it, wouldn't you be a good person to do it?* (EN: -3, CH: 2.7)

Also, we found that the uses of excessive politeness markers could introduce misalignments in perceptions. In the following message, it contains several politeness markers such as please('pls') and hedges ('Perhaps'). Despite of linguistic elaborations in making requests, NS felt those messages either moderately impolite or neutral while NNS perceived them moderately or very polite

***pls** see my comments on your revert on the talk page. **Perhaps** you'll consider undoing my revert?* (EN: -0.6, CH: 6.3)

Discussion

By collecting the politeness ratings from native English and Chinese speakers, we identified a set of online messages with disparate politeness judgements. Further, we characterized some linguistic patterns might contribute to varying politeness perceptions. Our findings suggest some

useful features for building a prediction model to detect potential cross-lingual communication breakdowns. In the future, we intend to expand our message pool and collect more politeness rating data from both NS and NNS. Also, we will continue exploring and investigating more linguistic patterns that could be included as one of the feature set to increase the accuracy of the prediction model.

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