(Im)politeness: Prosody and Gesture
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1 Introduction

The negotiation of (im)politeness that accompanies communicative events is mediated through various modalities, including the use of words conventionally associated with (im)politeness, the sound of the speaker's voice, and the use of polite bodily and facial gestures. For a speaker to be interpreted as polite, it may not be enough to simply use appropriate verbal expressions, or throw in a 'polite word' such as please or thank you. The speaker will also need to deliver the utterance in an appropriate tone of voice, and pay attention to body position and facial expression. In short, (im)politeness resides not just in what you say, but also how you say it.

The fact that (im)politeness is fundamentally multimodal has long been recognised within politeness research. Indeed, Brown and Levinson (1987) mention both prosody and gesture (or 'kinesics') at several junctures in their seminal work on politeness universals, and the iconic orange book cover features the well-known photograph of South Indian villagers using the namaste gesture (pressing palms together with fingers pointed upwards, whilst bowing
and smiling) to bid farewell to a departing government official. Brown and Levinson (1987) note, for example that Tzeltal speakers employ high pitch for negative politeness and creasy voice for positive politeness.

Despite this, detailed analysis of prosody and gesture has rarely featured in the (im)politeness literature, which has instead been dominated by the analysis of verbal politeness. Indeed, Culpeper (2011) observes that 'remarkably, the bulk of research on politeness or impoliteness pays woefully little attention to the role of prosody' (p. 146), and also notes that 'non-verbal cues ... receive relatively little attention in communication and pragmatic studies' (p. 151). The reasons for the lack of research on prosody and gesture are not altogether clear, although Mapson (2014, p. 163) points out that it may be due to practical difficulties involved in examining speech in its holistic entirety, which seemingly poses more challenges than the analysis of verbal linguistic elements on their own. This trend is now being reversed, however. Recent years have seen the emergence of a vibrant interest in the prosodic and gestural components of politeness, evidenced by a number of important research papers that will be reviewed in this chapter.

2 Key Concepts and Theories

2.1 Prosody

Language researchers agree that prosody conveys various communicative functions that range from semantico-pragmatic functions such as speech act marking (assertion, question, etc.), epistemic positioning, information status (focus, given vs. new information), as well as politeness and affective and emotional states (see Prieto 2015 for a review of the meanings encoded by prosody). Prosody refers to suprasegmental features of speech; in other words, vocal effects that accompany the sounds of individual segments of speech, and that extend over words, phrases or utterances. Prosody allows for the same word, phrase or utterance to be delivered in different ways, such as louder/quieter, faster/slower, with higher or lower pitch or with different intonation contours. Four important acoustic dimensions (and perceptual correlates) have been included in the study of the prosodic correlates of politeness:

1 Fundamental frequency (or F0) parameters. Fundamental frequency is the acoustic feature that measures the rate of vibration of the vocal cords and is the reflection of perceived pitch. It is typically measured in Hertz,
2.3 Gesture

Gesture refers to visible bodily action that is used as an utterance, or as part of an utterance (Kendon 2004, p. 7). Gestures allow people to engage in the exchange of meaningful information when communication by talk is impossible (e.g. waving farewell to someone behind a closed window). But gestures more commonly occur in accompaniment to talk, such as the hand beats and head nods that speakers produce as they engage in face-to-face interaction. Research on gesture is particularly concerned with explicating how gesture and speech are so intimately connected in human interaction.

Gestures can be analysed both according to their form, and according to their function. Regarding form, one coding system that is commonly used in politeness research is that of McNeill (1992, pp. 78–89, 377–80). This system is based on: (a) the identification of the actual articulator being used (hand, finger, arm); (b) its shape (e.g. open hand, index finger extended); and (c) its orientation (e.g. palm/finger toward up, palm/finger away from body, etc.).

From a functional point of view, McNeill (1992) proposes the following four types of gestures: iconic (also called representational gestures, e.g. gestures which represent features of the referent in a transparent way, such as framing the shape of a person while speaking about him/her), metaphors (which refer to more abstract notions, such as touching your heart while speaking about love), beats (or hand movements which have an emphatic function in discourse) and deictics (e.g. hand and index finger gestures referring to locations). Although gestures are most commonly produced by the arms, they are quite often produced by other means. For instance, some cultures have been shown to use lip or mouth points instead of finger points, such as the Arrernte people in Australia (Wilkins 2003).

The term 'gesture' is reserved for this particular form of bodily action, that works as utterance and over which the speaker is deemed to have some level of voluntary control. The term is not typically used to refer to habitual or involuntary bodily actions (e.g. touching one's own nose or hair while speaking). Also, 'gesture' is not usually employed to describe factors such as the orientation of the body (e.g. facing the interlocutor, or looking away from the interlocutor) and the distance between the interlocutors. Although such orientations take on obvious affective and social meanings, the movements that are used to establish them do not seem to constitute recognisable bodily gestures as such (Kendon 2004, p. 8). However, these kinds of bodily orientations can be studied under the wider rubric of non-verbal behaviour.

2.2 The Frequency Code

One powerful theory regarding the relationship between prosody and politeness is O'hala's (1984, 1994) Frequency Code Hypothesis, which concerns the assumed relationship between high pitch and politeness. O'hala (1994, p. 327) claims that high or rising pitch is universally associated with a range of social messages, including deference, politeness, submission and lack of confidence. Low or falling pitch, on the other hand, is associated with opposing social messages such as assertiveness, authority, aggression, confidence and threat. The rationale for these connections rests on the observation that high pitch is biologically associated with smaller size, since smaller animals will have smaller larynges that will produce higher pitched sounds. By using higher pitch when speaking politely, the speaker makes him/herself appear small and subdominant, and gives the impression that he/she is not in a position to coerce the hearer. Following O'hala's proposal, Gussenhoven (2002, 2004) outlined a broad account of universal intonational paralinguistic meaning expanding on the idea of the frequency code and two other biologically determined codes. The affective interpretations of the frequency code include 'feminine', 'submissive', 'friendly', 'polite' and 'vulnerable' for higher pitch and 'masculine', 'dominant', 'confident', 'protective' and 'aggressive' for lower pitch.
3 Critical Overview of Research

This section is structured around three important research questions that, broadly speaking, previous studies on the relationship between prosody/gesture and (im)politeness have attempted to answer.

3.1 What Role Does Prosody Play in the Communication of (Im)politeness?

Research has shown that prosody plays a crucial role in the negotiation of (im)politeness (see Hidalgo and Nebot 2014 for a review). By adopting certain prosodic patterns, speakers can change what may on the surface appear to be a polite utterance into an impolite one, and vice versa. For example, a polite farewell such as ‘goodbye’ can be turned into a rude farewell by virtue of its being accompanied by means of ‘faster tempo, tense articulation and [...] much higher pitch average’ (Culpeper 2005, p. 53). Similarly, utterances that include profanities and other potentially face-threatening language can be interpreted as mock impoliteness (rather than genuine impoliteness) when accompanied by certain prosodic features (see Sect. 4.2). Prosody also interacts with politeness in terms of social indexicality. In other words, speakers use specific prosodic cues when addressing status superiors, as opposed to status equals or subordinates. Winter and Grawunder (2011, 2012) found that Korean speakers would speak to status superiors using lower pitch, slower speech rate and breathier voicing.

Research in this area has worked towards establishing which acoustic features tend to correlate with politeness and impoliteness-related meanings. One of the acoustic parameters of prosody that has received most attention in phonetic studies of politeness has been the study of pitch. A relatively consistent finding points to an increase in pitch range and pitch height, which generally leads to a higher perception of politeness (Chen et al. 2004 for Dutch and English; Ohara 2001 for Japanese, among others), although there are exceptions such as the lower pitch used to mark indexical politeness in Korean noted above (see Sect. 3.2 for further discussion). Research has also shown that politeness may be communicated through a decrease in speech rate (Ogaka et al. 2000 for Japanese; Lin et al. 2006 for Taiwanese; Winter and Grawunder 2011, 2012 for Korean; Ruiz Santabarbina 2013 for Spanish; Hübscher et al. 2017, under review, for Catalan). In addition, dimensions of voice quality appear to be manipulated for politeness-related meanings, including breathiness (Campbell 2004 for English; Winter and Grawunder 2011, 2012 for Korean; Ito 2004). For example, Ito (2004) noted that aspiration noise (which could be a reflection of breathiness) is perceptually associated with polite speech in Japanese.

Phonological studies of politeness and intonation have shown that pitch contour choice encodes politeness across languages, with a tendency for a more frequent use of high and sustained boundary tones or upstepped (rather than downstepped) pitch accents in polite utterances. Orozco (2004, 2010) investigated the realisation of polite utterances in Mexican Spanish. She presented 12 participants with eight unpunctuated written requests and asked them to produce them in neutral and polite styles. While there were no outstanding differences in the choice of the nuclear pitch accent between conditions, the polite style favoured the use of a high boundary tone more than the neutral style did (72% vs. 64.4% of high boundary tones in each condition respectively). Another difference found between neutral and polite utterances was the more frequent use of a high initial boundary tone in the latter (64%) than in the former (36%). Devís and Cantero (2014) showed that both from a production and perception point of view, some of the most successful melodic characteristics of politeness attitudinators for Catalan were the use of high and suspended final and internal pitch inflections. Astruc et al. (2016) examined how politeness is encoded by intonation in Catalan offers and requests, and found that choice of intonation pattern is controlled by factors like social distance and the cost of the requested action. Catalan speakers more frequently used rising pitch patterns with high cost offers and high cost requests. By contrast, falling patterns were used more frequently with low cost offers. Similarly, Borràs-Cases et al. (2015) showed that both situational and social politeness factors govern the choice of vocative intonation in Catalan. On the other hand, pitch contour choices have also been linked to the expression of genuine impoliteness. For example, Wichmann (2000) pointed out that the polite fall in British English is a high fall, while the impolite fall is a low fall. She mentioned that the difference in perceived politeness between the two contours could be related to the fact that a high fall has been found to signal ‘more to come’, while the use of a low fall conveys a sense of extreme closure or finality (see Wichmann 2000; Culpeper 2011).

In addition to adopting a distinct ‘polite tone of voice’, research has shown that the perception of politeness can also be achieved through prosodic accommodation to the interlocutor’s pitch range (Lin et al. 2006) or to the interlocutor’s speech rate (Ogaka et al. 2000). On the other hand, impoliteness is triggered by prosodic dissociation (the opposite strategy to prosodic accommodation) with the interlocutor. Culpeper et al. (2003) attempted to explore this area by explaining how different types of impoliteness within
their proposed negative and positive impoliteness strategies could be manifested through prosody. For example, the positive impoliteness strategy of denying common ground or dissociating from the interlocutor is typically achieved through the mimicry of the interlocutor’s voice or through not accommodating to the loudness of the conversation. Hidalgo (2009) echoes Culpeper et al. (2003) by stating that elevating one’s tone of voice can be seen as a violation of the Cooperative Principle (Grice 1975), thereby achieving genuine impoliteness.

It is important to point out that the prosodic features of politeness reviewed in this section are not ‘inherently polite’ and do not apply systematically across contexts. Laplante and Ambady (2003) experimentally showed that the perception effects of what they called a ‘polite tone of voice’ (which included many of the characteristics mentioned above) depend on the content of the message. Although the polite tone of voice significantly increased politeness ratings when it accompanied positive messages (e.g., Would you like to go get ice cream?), this was not the case when it was associated with negative messages (e.g., Would you leave me alone?). In other words, no matter how hard speakers try to ‘soften’ the impact of a negative statement on the hearer, prosodic cues may not be able to compensate enough and might even result in the perception of sarcasm.

There may also be important differences as to how the prosodic correlates of politeness are produced and perceived between male and female speakers. Regarding production, Winter and Grawunder (2011) found that Korean women used a relatively more breathy-sounding voice when addressing status superiors in a polite speech register, than when addressing status equals in a casual register. However, men did not exhibit consistent differences between the two politeness registers with respect to this feature. This is similar in some respects to the results on Japanese reported by Lavelleye (1981) or Ohara (2001), who found that female Japanese speakers tend to express politeness by raising average F0. Moreover, Ohara (2001) reported that proficient second language learners of Japanese are well aware of the fact that raising one’s pitch projects femininity in this language. Regarding perception, Itozaru et al. (2015) found that there was an important difference between the way men and women perceived the role of pitch in Korean utterances. Male speakers perceived utterances with lower pitch as more polite, which is consistent with the findings of production studies which show that Korean speakers of both genders lower their pitch in polite registers. However, female speakers perceived utterances with higher pitch as being more polite, which constitutes a mismatch between how they produce politeness and how they perceive it.

3.2 Can the Frequency Code Work Across Different Cultures, and Different Modes of (Im)politeness?

The claim from Ohala’s (1984, 1994) Frequency Code Hypothesis (see Sect. 2.2) that high pitch is universally associated with politeness has found support across several languages. In Dutch and English, an increase in peak height can lead to higher levels of perceived friendliness (Chen et al. 2004). In Japanese, female speakers raise their pitch when speaking deferentially towards a professor (Ohara 2001) and when performing politeness formulae (Loveday 1981). In addition, raising pitch at the end of the utterance has been shown to exhibit politeness functions in this language (Ozuka et al. 2000). Research on Mexican Spanish has also shown that speakers favoured the use of a high initial and a high final boundary tone in the production of polite requests (Orozco 2008; Orozco 2010). Similarly, Devis and Cantero (2014) acoustically analysed a corpus of Catalan spontaneous speech and perceptually validated it. They found that one of the most successful melodic characteristics of politeness attenuators for this language (capable of converting commands into requests or confrontation into co-operation) was the use of high or suspended utterance-final and utterance-medial melodic inflections.

However, some recent research has shown that the frequency code may not be universal to all languages, or to all modes of politeness. Winter and Grawunder (2011, 2012) and Brown et al. (2014) showed that low pitch (rather than high pitch) correlated with the usage of a polite speech register in Korean, which is prototypically used to index that the hearer is of superior age or social status. In a follow-up study, Brown et al. (2015) collected comparative data from German, Austrian German, Russian, and Japanese speakers. None of these additional languages showed a significant effect of hearer identity (status superior versus status equal) on F0, although pitch was slightly lower for addressing a status superior in all languages, except for Japanese. It appears that in some languages, such as Korean, the indexing of superior social status requires that the speaker sounds calm, subdued and unanimated (rather than necessarily submissive). Similar results are also reported for Mursi (Irvine 1979) and for Catalan (Hubscher et al. 2017, under review).

In addition, other studies show that high pitch may be used to signal meanings related to impoliteness (rather than politeness). Stadler (2007) showed that in German and New Zealand English high pitch was used to express aggression. Similarly, Goodwin et al. (2002) demonstrated that Latin-American and African-American girls of elementary school age used pitch
leaps from their normal range of 250–350 Hz to around 600 Hz when producing disagreement turns in games of hopscotch. In addition, Nadeu and Prieto (2011) showed that in Catalan an increase in the final pitch height of yes–no questions leads to more impoliteness ratings, unless utterances were accompanied by a smiling face.

The studies discussed in this section suggest that pitch is employed in various ways across languages to achieve (im)politeness-related meanings. However, since the forms of (im)politeness are multiple, and the meaning of politeness is complex in some ways culture specific, the relationship between pitch and politeness is far more complex than originally suggested by the Frequency Code.

3.3 What Role Does Gesture Play in the Communication of (Im)politeness, and How Do Gesture and Prosody Interact?

A range of different gestures and other forms of non-verbal behaviour are involved in the negotiation of (im)politeness. Tree and Manusov (1998, p. 573), for example, identified a number of ‘aggravating’ and ‘mitigating’ non-verbal behaviours in American English, including no touching, more distance, indirect body orientation, unpleasant facial expression, lowered eyebrows, a loud voice and wide gestures (all ‘aggravating’), and pleasant facial expressions, raised eyebrows, direct body orientation, a tense, closed position with small gestures, softer voice, touch and close proximity (all ‘mitigating’).

However, research has also shown that many politeness-related gestures are culture specific (see Kita 2009). In a classic study on arm gestures, Efrem (1941/1972) demonstrated that Italian immigrants in New York used spatially more expansive gestures, moving the entire arm from the shoulder across the lateral plane, which meant that the gestures were highly visible. The perception that ‘Italians gesture a lot’ was produced not by increased frequency of gestures, but instead by increased saliency. Similarly, Müller (1998) showed that Spaniards produced more gestures above shoulder height. Maynard (1993) and Kita and Ide (2007) reported that Japanese speakers produced head nods not only more frequently than speakers of other languages, but also in different positions in the conversation. In addition, Kita and Espégy (2001) showed that some gestures may be impolite due to culture-specific taboos, such as taboos in Ghana related to giving, receiving, eating and drinking, as well as pointing, with the left hand. Pointing with the index finger may be restricted or avoided in certain cultures due to it being considered impolite or taboo (see Wilkins 2003, pp. 174–5). In Yoruba, index finger pointing towards a referent who is older may be impolite, although open-hand pointing is acceptable (Ola 2009). This also applies to many parts of East Asia, such as Taiwan.

Experimental research has shown that gesture interacts closely with prosody in the communication of (im)politeness. Nadeu and Prieto (2011) conducted two perception experiments related to the role of pitch range and its interaction with facial information on the perception of politeness. The first experiment assessed the contribution of varying degrees of pitch range expansion to the perception of politeness in Catalan questions. Contrary to expectation, the results showed that increasing the pitch range of the final portion of the utterance resulted in a progressive decrease in the degree of perceived politeness. The second experiment assessed the interaction between pitch range and facial information (e.g., smiling face vs. neutral face). In this case, the results revealed a completely different pattern than the one found in Experiment 1. Crucially, the tendency was for increased pitch height to be perceived as more polite only in the smiling face condition. This experiment provides empirical evidence that prosodic correlates are not directly linked to specific pragmatic meanings (e.g., higher F0 = politeness), and that prosodic information crucially interacts with gestural information. In sum, the work reviewed in this section points to a view of politeness that is inherently multimodal.

4 Case Studies

Research on the role of prosody and gesture in the communication of (im)politeness can generally be divided into production studies and perception studies. Production studies collect naturally occurring or elicited speech, which is then analysed in an exploratory fashion to uncover the prosodic and/or gestural patterns that occur in the (im)politeness-related situation under analysis. Perception studies, on the other hand, use experimental techniques to assess the role of prosody and/or gestures in the way that hearers reach politeness-related judgments. In this section, we look at example analyses from these two research traditions.

4.1 Production Data: Korean

In order to compare the phonetic profile of Korean contaymul (polite speech addressed towards a status superior) and ponymul (informal speech addressed towards a status equal), Winter and Grawunder (2011, 2012), collected
production data from native speakers of Korean using an oral Discourse Completion Task or DCT (Blum-Kulka et al. 1989). The task involved performing certain common speech acts, with half of these speech acts addressed to a status superior, such as a professor, and the other half being addressed to a friend. The following is a sample item from the DCT, with an example of a response given by one participant:1

Item: You visit your professor's office and ask him if he has finished writing a letter of recommendation for you. You tell him that it is very urgent, and ask him if he can write it quickly.

Example response: YEO, annyeonhaeyo, kyounuwim. Cey-ka, um, chuwehese ttaemyounyeo wa-i-sungeteyo. Ge, ku cok-eyse om pplekey yenlak-i wa-kekkoy-ensiye. Kaluye eun cengyo tay-i-ta-munci om yeotgap-ko sipb-ee wa-i-sungeta. 'Yes, hello, professor. I, uh, came because of the letter of recommendation. They contacted me and said that they need it quickly. So I came here because I wanted to ask how far along you are with it.'

Brown et al. (2014) used a similar task, only this time the utterances were scripted in order to produce contaymal and panmal utterance strings that were morphologically and lexically identical:

Item addressed to professor (in contaymal):
kyounuw-im, cinan pen-ey malteshna-si-nkhempyushe phulokulaym-ul kuwha-yisungeta. hulnetey sayonp-ey elyen-ese kuule-nunrey pappu-kyees-ciman camkkane kalukey-c eun-i-si-l suwu i-na-ye?

'Professor, I've bought that computer program that you mentioned last time. But the instructions are difficult, so I know you must be busy, but can you teach me how to use it.'

Item addressed to friend (in panmal):
Chinkun-ya, cinan pen-ey malta-n khempyushe phulokulaym-ul kuwha-yi-re. hulnetey sayonp-ey elyen-ese kuule-nunrey pappu-kyees-ciman camkkane kalukey-c eun-i-suwi i-na-ey?

'Hey buddy, I've bought that computer program that you mentioned last time. But the instructions are difficult, so I know you must be busy, but can you teach me how to use it.'

1 We would like to thank Boda Winter and Sven Grawunder for allowing us to use this example.

As shown in the examples above, the underlined parts of the utterances addressed to the professor and to the friend were identical in terms of morphology and lexical content and therefore differed only in their phonetic production.

This data collection technique was subsequently repeated for further languages. Brown et al. (2015) conducted a meta-analysis of the Korean data (16 participants from Winter and Grawunder 2011, 2012; eight from Brown et al. 2014), alongside newly collected data for Japanese (eight speakers), German (13 speakers), Austrian German (18 speakers) and Russian (six speakers).

The recordings were phonetically analysed using Praat (Boersma and Weenink 2016) for F0 (pitch), intensity (loudness) and a number of measures of voice quality: jitter, shimmer, harmonics-to-noise ratio and the difference between the first and second harmonics. Speech rate was also calculated by counting syllables as they appeared in the transcript, and then dividing these counts by the duration of each response. The data was statistically analysed with R (R Core Team 2013), using mixed logistic regression.

In this case study, we focus on two measurements—pitch and intensity—and how they appeared in the cross-linguistic comparison in Brown et al. (2015). Figure 14.1 shows the difference in the average F0 values (measured in Hz) between the polite condition (i.e. when addressing a status superior, such as a professor) and the informal condition (i.e. when addressing a status equal, such as a close friend). As can be seen, in both of the Korean datasets (Korean 1 = Winter and Grawunder 2011, 2012; Korean 2 = Brown et al. 2014), polite speech was notably lower in pitch than informal speech, and these differences were statistically significant. However, in the other languages the differences between polite and informal speech were much smaller, and indeed were not above chance. Turning to Fig. 14.2, this graph shows the difference in intensity values (measured in dB) between the 'polite' and 'informal' conditions. We see that 'polite' speech was less intense (i.e. quieter) than 'informal' speech for all languages, except for Russian, where the pattern was reversed (these differences were statistically significant for all languages).

These results suggest that the use of low pitch for signalling this particular mode of politeness in Korean may be specific to this language, whereas the use of intensity is more universal.

2 Praat can be downloaded free of charge from www.praat.org. This website also includes a useful beginner's manual and tutorials.

3 R can be downloaded free of charge from www.r-project.org. For an easily accessible tutorial on the linguistic applications of R, see Winter (2013).
In a subsequent study, Brown and Winter (forthcoming) carried out exploratory research of the gestures and other non-verbal behaviours that accompany polite conversational speech and informal pantomime speech in Korean television dramas. The authors coded and analysed the gestures used in four types of interactions: (1) male lead characters interacting with male intimates, (2) male lead characters interacting with male status superiors, (3) female lead characters interacting with female intimates; and (4) female lead characters interacting with female status superiors. The gestures and non-verbal behaviours were coded under the following categories: arm gestures, facial gestures, physical contact, self-touching, head nods and bows. The authors also coded the orientation of the speakers (i.e. whether their body was oriented towards or away from the interlocutor). It was found that casual speech contained more arm gestures, facial gestures, physical contact and self-touching. As shown in Fig. 14.3, the hand gestures often occupied a relatively large gesture space, and the facial gestures were highly animated in character. In contrast, these behaviours were almost totally absent from the polite speech register. However, the polite speech register contained more head nods and bows.

Regarding bodily orientation, a notable finding was that in interactions between status superiors and status subordinates, the subordinate would almost always orient their body towards the status superior and maintain eye contact on them, whereas the status superior would often orient their body slightly away from the subordinate and withhold eye contact, as shown.
in Fig. 14.4. Status superiors were particularly likely to move their physical orientation away from the status subordinate when they were uncomfortable or embarrassed. This finding is in line with previous claims that direct body orientation is associated with politeness and indirect orientation with impoliteness (Tree and Manusov 1998). However, it challenges the commonly held assumption that subordinates need to avoid eye contact to maintain politeness in East Asian cultures.

4.2 Perception Data: Catalan

The phenomenon of mock impoliteness (as opposed to genuine impoliteness) has been analysed by pragmatists as the use of impoliteness markers (e.g. the use of 'go to hell') with a social bonding intention rather than as a true expression of impoliteness (see Culpeper 2011; see also Culpeper et al. (Chap. 13); this volume). The two perception studies reported in McKinnon and Prieto (2014) were designed to assess the effects of prosodic and gestural cues in the interpretation of mock impoliteness. Two main factors were controlled in the two experiments, namely situational/discourse context (e.g. genuine impoliteness vs. mock impoliteness context), and types of prosodic and gestural signals (e.g. genuine impoliteness vs. mock impoliteness prosodic and gestural features). In order to prepare the materials, it was necessary to investigate which gestural and prosodic patterns are representative of genuine vs. mock impoliteness in Catalan. To do this, an oral Discourse Completion Task was employed which included situational prompts to elicit genuine vs. mock impoliteness responses (the reader can access the DCT used in the Appendix of that paper). A total of six native Catalan speakers were videotaped while participating in the oral DCT, and a total of 60 utterances were submitted to prosodic and gestural analysis with Praat and ELAN4 respectively. The results of the prosodic analysis showed that genuine impoliteness sentences were associated with prosodic features related to the expression of anger, while mock impoliteness sentences were associated with prosodic features related to the expression of joy (this is consistent with Culpeper et al. 2003). The results of the gestural analysis showed the most common feature amongst the genuine impoliteness data was the furrowing of eyebrows and a palm towards the centre gesture that moves straight up vertically, level with the participant's head, before possibly moving straight forward (see Fig. 14.5). By contrast, for mock impoliteness, the most consistent gestural features among all the participants were a smile, shaking of the head, as well a slightly raised arm up to the participant's mid-torso (see Fig. 14.6).

From these audio-visual materials, a set of 20 target utterances were chosen as stimuli for the perception experiments. A total of 97 native speakers of Catalan were asked to participate in two rating experiments. In Experiment 1, participants were presented with audio-only and audio-visual files of the same target sentences that were produced with mock impoliteness vs. genuine impoliteness prosodic and gestural cues. For each trial, they were asked to rate to what extent the speaker (a) was insulting (genuine impoliteness) and (b) was joking (mock impoliteness), on a 1 to 5 Likert scale. A total of 1,880 responses were obtained, which were submitted to a statistical analysis (Linear Mixed Model) with the statistics program SPSS. The results indicated a clear asymmetry between the evaluation of intended genuine vs. mock

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4 ELAN is a professional tool for the creation of annotations on video and audio resources. The program can be downloaded free of charge from http://da.mpi.nl/tools/dt-tools/elan/.

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impoliteness. While genuine impolite utterances are easily detected through prosody alone, mock impoliteness utterances generally need the addition of gestural cues to the prosodic cues to be successfully assessed.

In Experiment 2, participants were asked to rate the same utterances in two conditions (impolite vs. mock impolite) preceded with a set of matched and mismatched situational/discourse contexts that favoured either a genuine or a mock impoliteness interpretation. For example, the mock politeness rendition of the sentence ‘go to hell’ was heard with a previous context favouring either a mock impolite interpretation (matched discourse context) and also with a previous context favouring a genuine impolite interpretation (mismatched context). In the mismatched condition, genuinely impolite discourse contexts were associated with mock impolite utterances, and mock impolite discourse contexts were paired with genuinely impolite utterances. For each trial, participants were asked to rate on a five-point Likert scale the extent to which the speaker (a) was insulting (genuine impoliteness) and (b) was joking (mock impoliteness), as well as the degree of adequacy between the situational prompt and the target utterance. A total of 1,000 responses were obtained for this experiment, which were submitted to statistical analysis. First, as expected, the results of Experiment 2 revealed that mismatches between the discourse context and the utterance caused more uncertainty among listeners, which led them to rate the utterance as more ‘neutral’, i.e., neither genuine nor mock impoliteness. Second, Experiment 2 also revealed a distinction between the evaluations of genuine vs. mock impoliteness utterances. As in Experiment 1, when participants were presented with only the sound file (e.g., without gestures) of the intended mock impoliteness utterances, they displayed a higher level of uncertainty than when they were presented with gestures. Overall, the two experiments show that the evaluation of mock impoliteness is a sensitive pragmatic phenomenon, and that mock impoliteness is always prone to be misunderstood as impolite behaviour.

Fig. 14.6 Still video images of an example of mock impoliteness. Target sentence: 'Why don’t you shut the fuck up?'

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5 Summary and Future Directions

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5 Summary and Future Directions

The expression and perception of (im)politeness is a complex and dynamic phenomenon that is influenced by multiple sets of social and communicative factors. As demonstrated in this chapter, research has shown that prosody and gesture play crucial roles in the way that politeness is negotiated in context.

To date, research has tended to focus on fairly prototypical areas of (im)politeness, such as the prosody and gestures that accompany (im)politeness formulae, or speech addressed to a social superior. Going forward, researchers will need to integrate more complex and nuanced pragmatic factors into research designs, and look more closely at the way that the use of prosody and gestures varies across different contexts, or according to speaker identity. On this last point, the influence of gender on the multimodal expression of (im)politeness is expected to be a crucial research question, although it has attracted only very little research to date.

One strength of existing research into prosodic and gestural dimensions of (im)politeness is that it has featured languages that are relatively under-researched in the (im)politeness literature, such as Catalan and Korean. However, there is still a need for research into a wider range of languages, and for more direct cross-linguistic comparisons to be made. To facilitate cross-linguistic comparisons, researchers will need to establish standardised ways to not only measure prosodic parameters, but also to code gestural parameters and pragmatic information in a database, as well as comparable eliciting methods.

Finally, future research will need to address more directly the relative perceptual relevance of prosodic and gestural (im)politeness cues. Although previous studies have shown that these cues are important to perception, it is still not clear whether these non-verbal cues are of equal (or possibly superior) importance to the more widely researched verbal cues. In addition, research has not yet established in which situations (or positions within the utterance or interaction) non-verbal cues carry most meaning.
References


