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Is It Polite to Hiss?: Nonverbal Sound Objects as Markers of (Im)politeness in Korean

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This paper explores the politeness-related functions of an ingressive hissing-like sound that occurs frequently in Korean and which is typically transcribed as ssup. This nonverbal sound is produced by drawing air alongside the tongue or between the teeth and may appear either before the production of a turn, or during turn production. Previous studies have shown that Korean speakers produce more frequent hisses when addressing status superiors. This suggests a politeness-related function, particularly given the importance of marking social distance toward elders and superiors in Korean culture. In the current paper, we explore the pragmatic functions of these hisses in three distinct datasets (oral discourse completion task, dyad recordings, drama interactions). Our analysis shows that hisses perform four types of social actions: displaying delicacy, activity shift, word search, and conveying skepticism. Hisses occur at interactional or relational trouble spots to delay the progression of talk, while allowing the speaker to initiate or maintain their turn. They co-occur with other verbal and multimodal markers of hesitation. We thus see the underlying core meaning of hisses as being related to difficulty, uncertainty and hesitation, and the conveyance of reluctance to perform the problematic talk. The increased frequency of hisses and multimodal hesitation in interactions with status superiors shows us that speakers are trying to show more care and effort when interacting in situations where social distance exists. These results contribute toward our understanding of politeness as a multimodal and holistic phenomenon that is expressed across multiple verbal and nonverbal dimensions.

Keywords: politeness, nonverbal speech sounds, multimodality, breath intakes, fillers, hesitation

INTRODUCTION

Everyday interaction features thousands of sounds such as *um*, *uh*, *oops*, *ouch*, *meh*, *tch*, *yum* and *ugh*. A growing body of research shows that these sounds are applied in ways that are interactionally and socially meaningful (e.g., Wright, 2011; Ogden, 2013; Hoey, 2014, 2020; Culpeper and Oliver, 2020). In the current study we follow Reber (2012) and Reber and Couper-Kuhlen (2010) in referring to them as "sound objects" (Reber and Couper-Kuhlen, 2010; Reber, 2012), although they are also referred to by various other terms including "non-lexical vocalizations" (e.g., Keevallik, 2021), "vocal gestures" (following Mead, 1972; Dietrich et al., 2007; Harkness, 2011), and "pragmatic noise" (Culpeper and Kytö, 2010; Culpeper and Oliver, 2020).

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In this paper, we explore the potential politeness-related functions of a hissing-like sound object that occurs in Korean. This hissing sound, which was first reported for Korean in Winter and Grawunder (2012), is a lateral ingressive slick produced by drawing air along the sides of the tongue or between the teeth. Although it does not appear in dictionaries, Korean speakers may transcribe it as $\stackrel{\frown}{\boxplus}$ ssup. We will refer to this sound as a "hiss," even though "hissing" is generally used to refer to egressive sounds produced with air coming out of the lungs, rather than being sucked in as in the case of $\stackrel{\frown}{\boxplus}$ ssup. The reason for calling this sound object a "hiss" is that it is a very loud and salient highfrequency noise that one would auditorily describe as having a "hissing" quality. Moreover, we use the term "hiss" because past research used the same term for this particular Korean sound object (Winter and Grawunder, 2012; Kim et al., 2021).

Winter and Grawunder (2012) followed by Kim et al. (2021) both showed that speakers use this hissing sound more frequently when addressing a status superior than when addressing a statusequal friend, hinting at a politeness-related function given that indexing social distance is an important politeness practice in Korean performed primarily by grammaticized honorifics, but also by distinct acoustic and gestural behaviors (see Section Breathing and Hisses in Korean and Beyond below). However, neither paper investigated this matter in any depth, or establish any detailed reasons why hisses might be used more frequently toward a superior. We set out to fill this gap in the current paper.

Our goals in this paper are to establish the pragmatic functions of Korean hisses and use this analysis to explore how sound objects can take on politeness functions. To do this, we revisit the datasets used in Winter and Grawunder (2012) and Kim et al. (2021) and add one further dataset (Brown and Winter, 2019). By bringing the study of sound objects into the remit of politeness research we aim to contribute to a growing body of research that sees politeness as a multimodal phenomenon that is manifested across a range of modalities in addition to verbal speech (Brown and Prieto, 2017).

BACKGROUND

Multimodal Politeness

"(Im)politeness" involves the mediation of interpersonal relations via a range of different behaviors, including conventionalized acts of etiquette and rudeness, and the ritualized marking of formality and hierarchy. According to Brown P. (2015, p. 11,620) politeness is "a matter of taking into account the feelings of others as to how they should be treated, including behaving in a manner that demonstrates appropriate concern for interactors' social status and their social relationship."

Among the many different sub-categories of politeness, in this paper we focus on ways in which speakers modify their language according to social distance. We follow Leech (2016, p. 126) in seeing social distance as including both "vertical distance" (i.e. distance in terms of power or authority) and "horizontal distance" (i.e., distance in terms of solidarity, familiarity, and intimacy). Research has shown that social distance is one driving factor of politeness-related expressions (see Goldsmith, 2007, p. 227 for overview). Holtgraves and Yang (1992) found that Korean and American respondents used more polite request strategies when addressing superiors and strangers, with Koreans varying their responses more strongly. This mode of politeness has also been referred to in the literature as "deference" (Brown and Levinson, 1987), "discernment politeness" (Ide, 1989), and "bivalent politeness" (Leech, 2014).

(Im)politeness is communicated not just verbally, but also multimodally *via* other communication channels. This is evident from the fact that the politeness level of an utterance can be completely altered by nonverbal context. For instance, Culpeper (2011a, p. 57) points out that the seemingly "polite" question "Do you know anything about yo-yos?" can be rendered impolite by heavily stressing the beginning of "anything" and delivering the remainder of the utterance with sharply falling intonation.

On the acoustic level, politeness-related meanings are communicated via a range of cues, including pitch and intensity (loudness). Universalist approaches have claimed that high pitch is associated with politeness in all cultures (Brown and Levinson, 1987; Ohala, 1994) because high pitch signals small size and can therefore indirectly also signal submissiveness. However, a recent meta-analysis of data from seven languages (Winter et al., 2021) found that pitch is either lowered (Korean, Russian, Catalan, German, Austrian German), or does not differ (Japanese and Chinese) when using polite language toward a socially distant superior. In Korean, speakers seem to prefer a low, monotonous and quiet voice when politeness is required (Winter and Grawunder, 2012). In addition, Korean speakers, especially female speakers, hyperarticulate vowels when speaking politely (Oh et al., 2021).

Politeness-related meanings are also marked by the ways that speakers perform gesture and other bodily movements. Overall, body movements become more curtailed when politeness is required: they are less frequent, smaller, and less animated (Brown, forthcoming; Brown and Winter, 2019; Hübsch, under revision). The types of gestures that accompany (im)polite language may also be influenced by culture-specific associations between conventionalized gestures and (im)politeness. For instance, in Yoruba, index finger pointing toward a referent who is older may be impolite, although open-hand pointing is acceptable (Orie, 2009). In the current paper, we extend the study of multimodal aspects of politeness to one further domain: sound objects.

Sound Objects

"Sound objects" refer to various noises that speakers make during interaction, including fillers such as *um* and *uh*, exclamatory sounds (*oops*!, *ouch*!, *yum*!), and various clicks, whistles, sighs, sniffs, and breathing-related noises. Until recently sound objects were not widely researched, perhaps due to the assumption that they were "the flotsam and jetsam of mere performance" (Dingemanse, 2020, p. 188). In fact, sound objects may in some instances have advantages over lexicalized vocal expressions, such as for expressing affect in more immediate and genuine ways (e.g., saying *mmm* instead of saying "it tastes good") (Wiggins, 2002), and expressing abstract qualities such as movement, shape and timing, for example, during dance classes (Keevallik, 2021). Sound objects are used systematically for a wide range of functions, and their occurrence is sequenced and synchronized with verbal speech, as well as prosody and gesture.

Sound objects play important roles in the organizational sequence of interactions. Filler noises such as *um* and *uh* signal to the hearer that the speaker is busy planning their turn and should be given an opportunity to finish (Tottie, 2011, p. 403), but can also be used to invite the interlocutor to complete the utterance (Clark and Fox Tree, 2002). Turn completion in English can also be marked by sniffing (Hoey, 2020) and sighing (Hoey, 2014), whereas speakers of English (Wright, 2011; Ogden, 2013) and Mandarin (Li, 2020) use clicks to mark the onset of new and disjunctive sequences of talk. Speakers can also use sniffs (Hoey, 2020) as well as swallowing (Ogden, 2021) to delay the progression of talk. Wiggins (2002, 2013) demonstrates that nonverbal vocalizations indicating gustatory pleasure and disgust (such as *mmm* and *eugh*) invite collaborative assessments of food and also table manners.

Sound objects can also communicate a range of different affective and social stances. Clicks are used to signal disapproval through practices conventionalized as "tutting" (Ogden, 2013, p. 300), whereas post-completion sighs not only mark turn completion but also indicate a resigned stance toward the talk. In Egyptian Arabic, grunting communicates various emotional states, such as feeling disgusted or fed up (El-Bahrawy, 2007). In Caribbean Creoles, speakers use "kiss-teeth" (a noise produced "by an ingressive airstream captured in an air and saliva pocket created in the mouth through varying configurations of velar, dental and lip closures," (Figueroa, 2005, p. 74) to negotiate moral positioning, community norms and politeness. Finally, Korean uses "fricative voice gestures" (FVGs)—rough, voiceless sounds similar to the sound made when clearing the throat—to signal personally felt intensity (Harkness, 2011; Winter et al., 2019).

The use of sound objects can be a locus for sociolinguistic variation. Younger speakers have a higher *um:uh* ratio (Tottie, 2011; Laserna et al., 2014) in English and other Germanic languages, with women being a generation ahead of men in this change (Wieling et al., 2016). In Korean, whereas male speakers emit a *khu* noise after downing a shot of liquor, female speakers may prefer to emit *khya*, since the latter is associated with softness and femininity via the substitution of the high back vowel [w] for an open low-back vowel [a] (Harkness, 2011; Winter et al., 2019).

Sound objects frequently appear in synchrony with gestures and other body movements. For instance, Ogden (2013, pp. 311–314) shows that clicks often occur with swallowing, lip smacks, and removal of gaze. Caregivers comforting children in preschools in Sweden synchronize elongated, soft and whispery *sh*::: noises with physical soothing responses such as stroking and embracing (Cekaite and Kvist Holm, 2017). When feeding their infants, English-speaking parents produce lip smacks to encourage and endorse eating. These lip smacks co-occur with stable gaze on the infant, smiles, raised eyebrows, and head tilts (Wiggins and Keevallik, 2021). Sound objects thus work in unison with other multimodal cues to signal various interactional stances, as we shall see for politeness in this paper.

Breathing and Hisses in Korean and Beyond

The current paper looks at a type of nonverbal speech sound that we will refer to as "hissing." This sound object has not yet been studied in depth in previous research. It is produced by rapidly inhaling with the lips partially opened. Winter and Grawunder (2012) describe this ingressive sound as sounding similar to a lateral fricative (p. 810), and it can be produced with noisy frication arising from the sides of the tongues. Alternatively, these hisses can also be realized as a bidental fricative, with frication arising from in between the teeth. Such ingressive hissing sounds have rarely been mentioned in the literature on other languages, although similar phenomena may exist in Danish (Fredsted, 2005, p. 169), Chinese (Key, 1975; Eklund, 2008), Japanese (Critchley, 1939), and English (Brooke, 1988).

The intake and outtake of breath is known to play an important role in the organization of talk. Given that air needs to be breathed in first to produce speech, inbreaths can work as a cue for speech initiation (Jefferson, 1986; Schegloff, 1996). Speakers tend to produce more audible breath intakes before turn initiation to signal that they are about to take the floor (Ishii et al., 2014; Aare et al., 2015). Breath holding can be used as a turn keeping device, whereas releasing breath works to yield the turn to the next speaker (French and Local, 1983).

Speakers have the ability to manipulate the placings and design of their breath intakes and outtakes (Hoey, 2020, p. 119). For instance, inbreaths can be realized as gasps that indicate realization or shock (Lerner and Linton, 2004) or suck-teeth, which marks meanings such as disgust, defiance and disapproval in African American English (Alim, 2004). Ingressive hissing can also be used to express felt or anticipated pain (Diller, 1980). Meanwhile, outbreaths can be stylized as sighs of resignation (Hoey, 2014) or, in French as *pf* sounds that mark speaker disengagement (Baldauf-Quilliatre, 2016).

The hisses that are the focus of the current investigation can be thought of as a special form of stylized breath intakes, with the frication and resulting high-frequency noise making them very salient. For Korean, Winter and Grawunder (2012) and Kim et al. (2021) found that hisses appeared more frequently in speech addressed to status superiors, and less frequently in speech addressed to intimates. Winter and Grawunder (2012, p. 813) note that hissing might occur more frequently in formal speech due to the increased effort that it takes to produce noisy breath intakes, with the Effort Code (Gussenhoven, 2004) predicting that polite language tends to be more effortful. Moreover, they propose that similar to how ah and oh can sometimes function in English to make the process of planning sentences audible to interlocutors (Clark and Fox Tree, 2002), the hisses could serve the function of signaling that sentences are planned with care by filling otherwise inaudible pauses with clearly audible phonetic material. Meanwhile, Lee and Lee (2021) found that Korean hisses signals an epistemically "non-committal" stance; however, their research only looked at hisses that occurred in turn-initial responses to informationseeking questions. The current study addresses the need to look more deeply into the functions of hisses, and to establish the reasons why they might appear in speech addressed to a status superior.

METHODOLOGY

Data

This paper re-analyzes the datasets used in the two previous studies that reported that speakers use hisses more frequently when addressing a superior: (1) an oral discourse completion task from Winter and Grawunder (2012), and (2) a corpus of dyad recordings from Kim et al. (2021). In addition, we investigate hisses in (3) a corpus of TV drama interactions previously studied by Brown and Winter (2019).

Winter and Grawunder's (2012) oral discourse completion task (DCT) involved 16 Korean speakers (9 female, 7 male; aged 21-31) producing oral responses to written scenarios in a laboratory recording environment. The first four scenarios involved formulating a spoken message that they had to leave on an imaginary cell phone voicemail (e.g., leave a voicemail giving directions to a vacation destination). For the remaining 10 scenarios, they had to formulate the first utterance of a roleplay based on a given situation (e.g., apologize to your professor for arriving late for an appointment). Whereas the assumed interlocutor for half of the items was a status superior (such as a professor), the interlocutor for the other half was an intimate status equal (such as a friend). The stimuli materials, including visual images of the assumed interlocutors, were all presented on a computer screen in a sound-attenuated booth, and the utterances were recorded with a head-set microphone AKG C420 (linear characteristic) with 48 kHz/16 bit sampling. The total length of all the recordings was 1 h and 30 min. A list of the scenarios can be found in Winter and Grawunder (2012).

The dyad recordings by Kim et al. (2021) featured 14 Korean speakers (7 male, 7 female; aged 19-27) participating in two face-to-face interactions: one interaction with a friend, and one interaction with a professor. The friends were actual samegender friends of the participants, whereas the professor was a confederate who was a 60-year-old male professor of English literature. The two recordings occurred on different days and were counterbalanced so that half of the participants interacted with the professor first, and half of them interacted with the friend first. During the recordings, participants performed four interactive tasks: a natural conversation where they prompted to talk about a movie they had seen recently, a retelling of a "Tweety Bird" cartoon (e.g., McNeill and Duncan, 2000; Kita and Özyürek, 2003), a map task (Anderson et al., 1991), and an apology role-play previously used in Brown (2011). The interactions were video recorded using a Canon VIXIA HFM 41 video camera. The total length of all the recordings was 5 h and 8 min.

The corpus of TV drama interactions consists of just under 3 h (2:58:28) of video clips collected from three South Korean televised drama series: *Bad Guy* (SBS, 2010), *Pinocchio* (SBS, 2014), and *Two Outs in the Ninth Inning* (MBC, 2007). These are all fictional mini-series that focus on the lives of young professionals. We analyzed the speech of six prominent characters from these dramas, three females and three males (one male and one female from each series), all of whom are young professionals in their mid-twenties or early thirties. For each of these six characters, we identified a same-sex workplace superior and a same-sex intimate status equal with whom they had regular interactions.¹ We then extracted video clips of all dyadic interactions between these characters.

There are some important differences between each of these datasets. Only the dyad recordings are both unscripted and interactional. The oral DCT is unscripted, but not interactional (since the interlocutor was only imagined), and the drama interactions are interactional but scripted. Despite (or perhaps due to) their scripted nature, the drama interactions provide some very vivid examples of how hisses can be used alongside facial expressions and other body movements to communicate various discourse functions. The drama data also allows us to assess the extent to which hissing is reflected in Korean popular culture, which has become an important context for global access to the Korean language (see Min, 2021).

The advantage of considering all three of these data sources for the current study is that they all contain examples of the same speakers producing language in two conditions: (1) a socially distant condition where they are addressing a status superior, and (2) a socially close condition where they are addressing a status equal. Our previous analyses of these datasets show that the speakers change their behaviors in various ways between these two conditions. When addressing the superior, they used more honorifics and backchannels (Kim et al., 2021), spoke with a lower-pitched and more monotonous prosody (Winter and Grawunder, 2012), moved less and adopted more compact body positions (Brown and Winter, 2019), and used smaller and less expressive gestures (Brown et al., forthcoming). We now look in more detail at the different frequencies of hisses.

Analysis

We coded all hisses that appeared in the transcripts of the three datasets. To distinguish hisses from simple breathing noises, we followed the criterion that the hisses needed to have a clear sibilant-like quality. Following native speaker intuition regarding how these hisses should be transcribed, we represented them in our transcripts as $\frac{24}{11}$ *ssup*. The coding resulted in the identification of a total of 291 hisses: 102 hisses in the oral DCT, 161 in the dyad recordings, and 28 in the TV dramas.

The analysis followed two steps. We first of all coded the hisses according to whether they occurred in interactions with superiors or with inferiors in order to confirm the findings of Winter and Grawunder (2012) and Kim et al. (2021) that these noises do indeed occur more frequently when interacting with superiors.

Next, we adopted an integrative pragmatics framework (Culpeper and Haugh, 2014) to establish the social actions that the hisses are performing. Integrative pragmatics is an approach that focuses on establishing what form-function relationships mean to language users during interaction, and in particular

¹In a few cases, data was extracted from interactions with more than one interlocutor in each category to compensate for a lack of data in that category. Specifically, two different male superiors were used in *Bad Guy*, two different female status equals in *Pinocchio*, and two female status equals and two male status equals in *Two Outs in the Ninth Inning*.

situated, sequential contexts (Culpeper and Haugh, 2014, p. 266). This approach draws on an interactional linguistics (Couper-Kuhlen and Selting, 2017), particularly ethnomethodological conversation analysis and work on multimodality in human interaction. We analyzed the social actions performed by hisses by building collections of recurrent co-occurrences between hisses and particular pragmatic contexts, and analyzing in detail how sequential position and turn design lead to action formation (Qiu et al., 2021). Going beyond conversation analysis (which traditionally is not a field that concerns itself with politeness, Culpeper, 2011b), the integrative framework allows us to look at how these social actions have the potential for generating politeness-related social meanings.

The identification of social actions performed by hisses occurred in an inductive, bottom-up fashion. We began by tagging specific types of sequences, speech acts and linguistic patterns that co-occurred with hisses. As we reviewed more data, we grouped the codes into larger concepts until we arrived at four categories. Of these four, we noticed that the first three corresponded closely with three categories used in previous studies on sound objects (including Wright, 2011; Hoey, 2020).² We therefore adopted terminology from these studies for convenience when naming the categories, although it should be emphasized that this was done in a bottom-up fashion as the categories emerged, rather than trying to match the hisses to pre-existing categories.

- **Displaying delay and delicacy**: The speaker hisses when attempting to delay the initiation or progression of a turn at a delicate point in the interaction, namely before a dispreferred response.
- Activity shift: The speaker hisses before transitioning to a new sequence of talk.
- Word search: The speaker hisses when attempting to recall a word or detail.
- **Conveying skepticism**: The speaker hisses before expressing a questioning attitude or doubt regarding the truth value of the prior turn made by the interlocutor.

The entire dataset was double-coded by two independent coders, who were the first and second authors of the papers. The second author is a native speaker of Korean, whereas the first author is a second-language speaker who uses Korean at home with his family. Initial levels of agreement exceeded 90% and discrepancies were discussed until consensus was reached and each token was distributed to one "best fit" category. We view these four categories as being inter-connected rather than discrete groupings. In our presentation of the data, we discuss cases where tokens displayed characteristics of more than one category.

In line with moves within pragmatics and conversation analysis to view interaction as a multimodal achievement, we analyzed bodily visual practices (Ford et al., 2012) (i.e., gaze, head movements, gestures, etc.) that occur when hisses are performed, although this was only possible for video-recorded data (dyad recordings and drama interactions).

Raw counts of the hisses are available under the following repository: https://osf.io/8ud7q/.

RESULTS

Frequency of Hisses

The data contained a total of 291 hisses, with 102 (3.57 per 100 syllables) in the oral DCT, 28 (2.25) in the drama data, and 161 (0.18 per 100 syllables) in the dyad data. It is notable that the frequency of hisses was highest in the monologic data (i.e., the oral DCT), followed by the scripted data (dramas), with the conversational data having the lowest number. We attributed the high number of hisses on the oral DCT to the sensitivity of the situations presented. In addition, monologic talk requires a high degree of planning and information recall that may result in hesitations that are filled with hisses.

The production of hisses varied across individual speakers. Out of a total of 36 main speakers across the three datasets, 29 of them hissed at least once, and 7 speakers did not hiss at all (5 on the oral DCT and 2 in the dyads). Of the 7 non-hissers, 5 of them were female (4 on the oral DCT and 1 in the dyads). Whereas, most of the hissers produced just a handful of tokens each, there were a small number of speakers who hissed very frequently. On the oral DCT, participant 4 (female) hissed 26 times across both conditions, whereas only three others produced more than 10 hisses. In the dyad task, participant 9 (male) hissed 43 times, which was more than double the frequency of any other participant.

Consistent with the findings of Winter and Grawunder (2012) and Kim et al. (2021), we confirmed that overall speakers produced more hisses when addressing a socially distant status superior than when addressing a friend (Table 1). One hundred eighty hisses (2.97 per 100 syllables) occurred with superiors, compared with 111 (1.60 per 100 syllables) with friends. Thus, the rate of hisses is almost twice as high in the superior than in the friend condition. The pattern of hissing more when addressing superiors was attested in the oral DCT and dyad recordings, but was not reflected in the overall counts for the drama interactions. However, this reverse pattern in the dramas was driven by only three of the six characters who hissed more with friends. Across all three data sets, from a total of 29 speakers who produced hisses, 17 speakers (59%) produced more hisses in the socially distant condition (9 in DCT; 2 in dramas; 6 in dyads), 8 (28%) produced more in the socially close condition (2 in DCT; 3 in dramas; 3 in dyads), and 4 (14%) produced the same amount (1 in dramas; 3 in dyads). Since both the DCT and the dyad recordings involve participants carrying out the same tasks with superiors and with friends, we can be confident that the different frequencies of hisses are driven by the identity of the interlocutor.

Regarding the sequential organization of hisses, we found that the majority of hisses occurred during a turn (233, including 149 with superiors and 84 with inferiors), including transitionrelevance places, whereas the minority were turn-initial (58, 31

 $^{^2\}mathrm{Hoey}\,(2020)$ also found that marking turn completion and yielding the turn space was an important action for sniffing. Although some hisses may also occur at transition-relevance places, we did not find turn yielding to be a salient action performed by these sound objects.

TABLE 1 | Frequency of hisses.

		Superior	Friend
Dral DCT	N	72	30
	Per 100 syllables	5.05	2.09
	%	71%	29%
yad recordings	Ν	98	63
	Per 100 syllables	0.19	0.16
	%	61%	39%
/ dramas	Ν	10	18
	Per 100 syllables	1.34	3.59
	%	36%	64%
otal	Ν	180	111
	Per 100 syllables	2.97	1.60
	%	62%	38%

with superiors and 27 with inferiors).³ The higher proportion of hisses occurring during turns shows the limitation of analyzing only turn-initial hisses (Lee and Lee, 2021).

Social Actions Performed by Hisses

We now take a closer look at the four social actions that hisses are performing. We analyze these social actions in decreasing order of frequency: displaying delay and delicacy (most frequent), activity shift, word search, and conveying skepticism (least frequent). The frequencies of hisses that corresponded to each social action are displayed in **Table 2**.

Displaying Delay and Delicacy

Delay and delicacy refers to instances in which a speaker hisses when attempting to delay the initiation or progression of a turn at a delicate point in the interaction, namely before a dispreferred response or other sensitive action (Hoey, 2020). These types of hisses occurred 129 times in the data and showed a large frequency difference depending on context: 94 tokens with the superior (17 turn-initial; 77 during a turn) compared to only 35 with the intimate (10 turn-initial and 25 during a turn).

Hisses that we classified as delay and delicacy tended to occur directly prior to the most socially sensitive part of an activity. For instance, when speakers were performing speech acts that are rapport sensitive (Spencer-Oatey, 2004) such as apologies, requests and disagreements, the hiss would occur directly before the head acts (in other words, the core or nucleus of the speech act). In the following two examples that come from the oral DCT, a student is requesting a letter of recommendation (1), and a workplace inferior is telling their workplace superior that they have taken a wrong turn and need to go in a different direction (2). In both examples, the speaker uses the first two lines to provide justification for the speech act, terminating with the verb ending *–nuntey*, which marks the preceding clause as background

information for the main business that follows in the next clause (Yeon and Brown, 2019, p. 339). The speaker then hisses in line 3 of both examples, before embarking into the head act itself from line 4, which is punctuated by an *um-uh*-type filler (line 5), which further delays the delivery of the speech act. In these examples, the hiss is occurring directly before the most sensitive part of the utterance, where the speaker is performing social actions with potentially high imposition, namely requesting professor to write a recommendation letter quickly (example 1) and telling the department chief that he needs to turn the car around (example 2).

(1) Oral DCT (Requesting letter of recommendation from professor)

- 1 M4 추천서가 chwuchense-ka "the letter of recommendation"
- 2 M4 급하게 좀 빨리 필요할 것 같은데 *kuphakey com ppalli philyoha-l kes kathuntey* "it seems like I need it urgently, quite quickly"
- 3 M4 씁
 - ssup [hiss]
- 4 M4 언제 가능한지 *encey kanungha-nci* "when would it be ready"
- 5 M4 어
 - e [filler]
- 6 M4 좀 말씁해주셨으면 좋겠는데 com malssumha-y cwu-si-ess-umyen coh-keyss-nuntey "it would be great if you could tell me"

(2) Oral DCT (Telling department head he has taken a wrong turn)

- 1 F7 어부장님 *e pwucangnim* [filler] "Esteemed Department Head"
- 2 F7 아까 그 쪽 길로 오른쪽으로 꺾어야 되는 걸로 알고 있 는데

akka ku ccok kil-lo olunccok-ulo kkekke-ya toy-nun ke-l-lo al-ko iss-nuntey

"as far as I know, we should have turned onto that street just now"

- 3 F7 씁 [hiss]
- 4 F7 한 번 차 돌려서 그 쪽으로 가는 게 낫지 않을까요? pen cha tolly-ese ku ccok-ulo ka-nun key nas-ci anh-ulkkayo?
 "wouldn't it be better to turn the car around and go that way?"

In these kinds of examples, we find that the head act that follows the hiss typically contains other forms of mitigation. In example (1), the request that the professor writes the letter quickly is

³Hisses listed here as occurring "during a turn" include 21 hisses (14 with superiors and 7 with inferiors) that were turn-final. These only occurred in the dyad recordings. Due to their comparatively low frequency, we did not create a separate category for these hisses.

TABLE 2 | Social actions of hisses.

	Delicacy and delay		Activity shift		Word search		Skepticism		TOTAL	
	Superior	Friend	Superior	Friend	Superior	Friend	Superior	Friend	Superior	Friend
DCT	43	7	17	6	12	17	0	0	72	30
Dramas	10	12	0	4	0	0	0	2	10	18
Dyads	41	16	25	14	32	33	0	0	98	63
TOTAL	94	35	42	24	44	50	0	2	180	111

5

performed indirectly in the guise of an inquiry into when the letter can be written ["it would be great if you could tell me when you can (write) it]." In example (2), the speaker's belief that the driver has taken a wrong turn is stated with the non-factive "know" construction *-lo alta* (line 2), which was shown in Sperlich and Lee (2021) to be a more indirect and polite way to signal disagreement. The instruction to turn the car around (line 4) is then framed as an indirect suggestion ("wouldn't going that way be better?"). In the second case, we follow Lee and Lee (2021) in seeing this as an instance where the content following the hiss features reduced epistemic commitment on the part of the speaker, who frames the advice to take another road only as a possible better alternative.

We also found a pattern for hisses to occur in delicate situations after the noun phrase cey-ka "I-nominative" when participants were performing actions such as admitting blame, making offers to repair their wrongdoings, or stating their personal needs. In the following extract from dyad recordings (roleplay task), the participant is apologizing for losing the professor's rare out-of-print book. The participant utters ceyka "I-nominative" followed by a hiss (line 5) as he sets out his plan to repair his wrongdoing by searching for a second-hand copy online (there is also a previous hiss in this sequence in line 2). In synchronization with the hiss, the participant shifts his gaze away from the professor's line of sight and looks up to his right (see figure below the extract). Some studies have found that gazing up and to the side is associated with memory retrieval (see Christman et al., 2003). But here it seems to combine with the hiss to mark delay. The delivery of the offer of repair is further delayed by way the participant repeats lexical content across lines 6-7, including pangpep "method" and tollye/kacta tulita "return."

(3) Dyad Recordings (Roleplay)

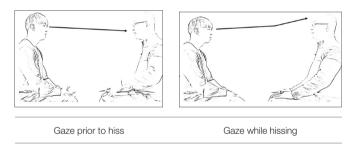
- 1 M8 그러면은 제가 kulemyenun cey-ka "in that case I"
- 2 M8 씁 ssup

[hiss]

- 3 M8 중고나라 뭐 이런 데서 중고로라도 *cwungkonala mwe ilen teyse cwungko-lo-lato* "will just [buy a] second hand [copy] from [the website] *Joonggonarra* or similar"
- 4 M8 어떻게든 제가 구입을 해서라도 ettehkeytun ceyka kwuipul hayselato "[I] will just purchase [a copy] however I can"

M8	씁
	ssuț

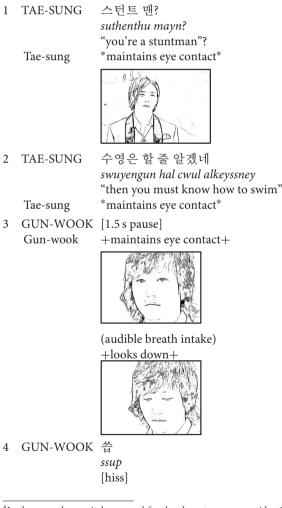
- [hiss]
- 6 M8 최대한 찾을 수 있는 방법으로 choytayhan chacul swu issnun pangpepulo "I will find the best method I can"
- 7 M8 돌려드리는 방법으로 해서 tollyetulinun pangpepulo hayse "[I] will use a method to return the book to you"
- 8 M8 무작, 무조건 갖다 드리도록 하겠습니다 *mwucak, mwucoken kacta tulitolok hakeysssupnita* "I will return the book to you without fail"



In Korean, pronouns are generally omitted when the referent can be identified via context (Lee and Ramsey, 2000; Sohn, 2001). Including the first person pronoun when talking about your own actions tends to be a marked choice. Indeed, in example (3), the referential meaning of M8's talk would remain intact even if the pronoun were omitted. Including the pronoun, however, performs two politeness functions. First of all, participant M8 selects the honorific first-person pronoun ce, which is prototypically used "to lower oneself in relation to a senior or non-acquaintance" (Chen and Lee, 2020, p. 119). Speakers may strategically include this pronoun when performing dispreferred actions "to emphasize their humble position ... and thus reinforce the impression that they are not in a position to impinge" (Brown, 2011, p. 170). In addition, when ce is paired with the nominative particle -ka in cey-ka, this construction is used specifically when speakers attribute responsibility to themselves (Oh, 2007, p. 470), such as here where M8 is promising to do all within his power to replace the book. By pausing after cey-ka, and making that pause more audible through the inclusion of a hiss, the humble pronoun is the last lexical item that is heard for a comparatively long period of time, emphasizing the pronoun and its politeness function. These results show that hisses cluster around specific sites, particularly those known already to be "hot spots" for politeness.

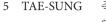
Hissing can also be used in delicate situations to avoid saying anything at all. In the following extract from the drama *Bad Guy*, status superior Tae-sung realizes that focal character Gun-wook is the same person who had previously physically attacked him in an underwater incident. On hearing that Gun-wook used to work as a stuntman, Tae-sung says to him in an accusing manner that he must know how to swim (line 2), insinuating that Gun-wook was the instigator of the underwater attack. In response to this, Gun-wook pauses for 1.5 s, produces an audible breath intake (line 3) followed by a hiss (line 4). Whereas, the breath intake is sequenced with gaze aversion toward the floor, the hiss is accompanied by Gun-wook looking off to the side and into the distance, similar to in the previous example (example 3). The hiss effectively works as a way for Gun-wook to avoid answering Tae-Sung's question.⁴

(4) TV Dramas (Bad Guy)



+looks away+





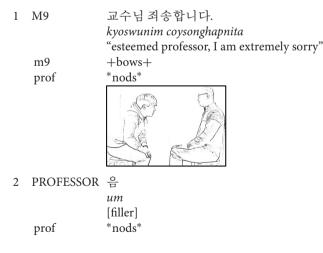
Tae-sung

죽여봐 *cwukyepwa* "kill me now" *maintains eye contact*



Whereas, hisses in delicate situations tended to function to delay the ensuing talk (or even avoid saying anything at all), we found one case of a hiss that occurred following an apology and after turn completion. In this instance from roleplay part of the dyad recordings, M9 starts with the apology head act (line 1), which is followed by an explanation for why he was late (lines 3-7). His apology is accompanied by bowing (line 1) and a compact body position, as well as use of the highest form of hearer honorifics (the -supnita ending in lines 1 and 7), all of which are known markers of deference (Brown and Winter, 2019; Kim et al., 2021). The apology is also punctuated by hesitation, including an um/uh-type filler in line 2 and a hiss in line 4, and a syntactically non-obligatory use of cey-ka "I-nominative' in line 6.5 Then, after completing his turn in line 8, M9 produces a long and audible hiss. The hiss here, which occurs directly after the -supnita honorific ending, appears to emphasize M9's awareness of the delicacy of the situation.

(5) Dyad Recordings (Roleplay)



⁴In the examples, capitals are used for the character names or identifiers for the lines with spoken content, whereas lowercase is used for bodily visual practices. Descriptions of bodily visual practices are preceded and followed by crosses (+) for the main characters/participants, and by asterisks (*) for the other characters/participants (based on Mondada, 2014).

⁵Here the *cey-ka* "I-nominative" appears in a sentence where the grammatical subject of the sentence "my previous class finished a little late" is clearly "previous class," which is also marked with a nominative particle. The inclusion of *cey-ka* attributes responsibility to the speaker, even though the late ending of the class would clearly be outside his control.

3	M9	약속 시간보다 좀 늦어서
5	IVI)	yaksok sikanpota com nucese
		"because I've come later than the
		appointment time"
	m9	+maintains eye contact+
4	M9	쓰
		ssup
	m9	[hiss]
_		+maintains eye contact+
5	PROFESSOR	어 그래 e kulay
		"yeah, right"
	m9	+maintains eye contact+
6	M9	네 제가 전 수업이 조금 늦게 끝나가지고.
U	1117	ney ceyka cen swuepi cokum
		nuckey kkuthnakaciko
		"yes, my previous class finished a little late"
	m9	+two-handed gesture to the left+
		No. No.
7	M9	전 교수님하고 얘기 좀 하다 보니까 좀 늦었
		습니다
		cen kyoswunimhako yayki com hata ponikka
		com nucesssupnita
		"and then I talked with the professor a little
		and so I was late"
	m9	+returns hands to knees+
		All
8	M9:	쑵
		ssup [hiss]
	m9	+maintains eye contact+
	1117	Thankanis eye contact T

In sum, the current section has shown that hisses are used by several speakers to mark delicacy during sensitive parts of interaction. These hisses most often function as a device for delaying talk, similar to the sniffs analyzed in Hoey (2020). They often occur alongside other politeness-related devices, including but not limited to constructions that show a decrease in speaker epistemic commitment (Lee and Lee, 2021). By hissing, sniffing and using other filler devices when carrying out sensitive social actions, speakers "perform" a stance of hesitation and sensitivity and give the impression that they are tentative about going ahead with the dispreferred segment of talk.

Activity Shift

We now look at hisses that occurred in activity shifts, in other words, that occur at the boundary when a speaker transitions from one sequence of talk to the next (e.g., when shifting topic, or when moving from greeting and small talk into the main topic).⁶ Across all three datasets, these activity-shifting hisses occurred 66 times: 42 times with superiors (1 turn-initial; 41 during turns) compared to 24 with intimates (4 turn-initial; 20 during turns).

In the following extract from the oral DCT, F5 is leaving a voicemail for her professor explaining the recipe for multigrain rice. After providing a greeting and giving her name (line 1–3), she hisses (line 4) before moving into the main activity of her call, where she relays the recipe.

(6) Oral DCT (Leaving a voicemail to professor explaining a recipe)

1 F5 여보세요 *yeposeyyo* "hello"

2 안녕하세요 교수님 annyenghaseyyo kyoswunim "greetings, esteemed professor"

- 3 저지원인데요 ce ciwen-intey-yo "this is Jiwon"
 - 씁 *ssup* [hiss]

4

5

저번에 저한테 잡곡밥 요리법 물으셨죠? *cepeney ce-hanthey capkokpap yolipep mwulusyesscyo?* "last time you asked about the recipe for mixed rice"

Similar to the Oral DCT examples presented in the previous section on "delicacy and delay," note how the hiss here is again occurring after the verb ending *-nuntey* in line 3. This suffix positions the previous clause where the speaker gives their name as background information, before the speaker moves on to the specified task of the DCT in line 5, which on this occasion was to relay a recipe for mixed rice. These hisses for "activity shift" thus appear to share something with those we classified as "delicacy and delay." Shifting between different sequences of talk does not intrinsically have a high degree of imposition, particularly in this case where the shift from the greeting to the main activity is rather expected. However, the fact that four of our 16 participants hissed at this same juncture on this item with the superior but never with the friend suggests that these transitions may be more interactionally sensitive with superiors. The care that the

⁶Hoey (2020) also uses the notion of "activity shift," but in a slightly different way than we use it here. He discusses the concept more in terms of changing the mode of depiction (e.g., from a prosaic description to an embodied one), although it is only mentioned in a footnote (and not as a main category for sniffing).

speaker is taking is also demonstrated by the inclusion of a nonsyntactically obligatory use of the pronoun *ce* "I" in line 5, which is used in sensitive situations to emphasize the speaker's humble position (Brown, 2011, p. 170).

Disjunctive sequences were also marked by hisses in the interactions with friends. In the next example from the drama *Pinocchio*, Chan-su places his arm around the shoulder of focal character Dal-po (line 1), in an example of physical touching that is fairly common amongst male intimates in South Korea. After a few seconds, Dal-po disrupts the flow of conversation and starts a new sequence where he takes issue with Chan-su's haptic behavior (line 4). This shift to a new sequence is preceded by a hiss, and also overtly marked by the disjunctive marker *kuntey* "by the way," as is often the case in disjunctive sequences (Wright, 2011). Dal-po's subsequent observation that "as far as I remember we didn't use to be this close" (lines 6–8) is interrupted by an unfilled pause, during which he taps Chan-su's hand to encourage him to remove it (line 7).

(7) TV Dramas (Pinocchio)

(7)	I v Drama	s (Pinocchio)
1	CHAN-SU chan-su	너 그걸 다 외운 거야? <i>ne kukel ta oywun keya?</i> "you memorized all that" *puts arm around dal-po's shoulder*
2	DAL-PO	<u>o</u>
		ung
		"yeah"
	dal-po	+nods+
3	CHAN-SU	우와
		wuwa
		"wow"
	dal-po	+turns head to look at Chan-su's hand on
		his shoulder+
4	DAL-PO	[1 s pause] 씁
		ssup
		[hiss]
	dal-po	+turns head back toward Chan-su+
5	DAL-PO	근데 <i>kuntey</i> "however"



8 DAL-PO

6

7

이럴 정도로 친하지는 않았던 것 같은데. *ilel cengtolo chinhacinun anhassten kes kathuntey* "we didn't use to be this close"

dal-po



The presence of the disjunctive marker *kuntey* "by the way" prompted our classification of this hiss as "activity shift." But this example clearly displays some characteristics of two other categories: "delicacy and delay" and "word search." The hiss has elements of "word search" in that Dal-po positions himself as trying to remember how close they had been (they had recently been reunited after having not met for several years), as well as "delicacy and delay" in that Dal-po is questioning the substance of their friendship. This example therefore suggests that the categories that we are analyzing here are somewhat connected, a point that we return to in the discussion.

Word Search

"Word searches" refer to instances where the speaker pauses while attempting to recall not just a vocabulary items, but any kind of detail or memory (Hoey, 2020)⁷, and fills this pause with a hiss. This type of hisses occurred 94 times in total and at similar numbers across the two contexts: 44 times with superiors (10 turn-initial; 34 during a turn) and 50 with intimates (11 turninitial and 39 during a turn). These similar frequencies suggest that these hisses and the activity they are performing are not particularly related to politeness, but closer examination shows that word searches could be performed somewhat differently with superiors than they were with friends.

In the following example from the dyads (natural conversation), F3 is asked by the professor about which movie she has seen lately (line 1). Over the following sequence of turns (lines 2–7), it emerges that she ostensibly does not watch many movies and is unable to name one that she has watched recently. While attempting to recall a movie that she watched, she applies several hesitation devices including repeating elements

⁷Although Hoey's (2020) analysis of sniffing counted word searches under "delicacy and delay," this word search function appears to be more frequent for hisses and warrants its own category.

of the question (lines 2 and 5), and a hiss accompanied by looking up and to the side (line 3). Looking up and to the side is associated with memory recall (see for example Johansson and Johansson, 2014), suggesting that this hiss is related to word search.

(8) Dyad Recordings (natural conversation)

PROFESSOR 그 요새 뭐 본 영화 중에 재미있는 거 있어? 1 ku yosay mwe pon yenghwa cwungey caymiissnun ke isse? "have you seen any good movies recently?" f3 +gaze on professor's lower face+



choykuney pon yenghwayo?

"movies I've seen recently?"

+gaze on professor's lower face+

2 F3

f3

3 F3

f3



PROFESSOR 응 4

> ung "yeah"

씁

ssup

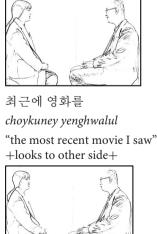
[hiss]

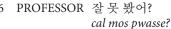
f3

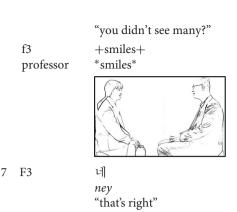


5 F3

f3







We analyzed the display of hesitation in this example as primarily taking on a word search function and "buying" the participant extra time to answer the question. Alternatively, we could view this instance as performing a delicate social action and delaying the progression of talk. It may well be that F3 would prefer not to admit that she never watches movies (or maybe that she has seen a movie recently, but for whatever reason would prefer not to talk about it). Rather than putting this inability (or reluctance) to answer the question on record (which may not be appropriate when talking with a superior), the hissing and other hesitation markers allow the professor to infer (in line 6) that she does not watch many movies (or would rather not answer the question). The hissing allows F3 to yield her turn without answering the question, and the professor then moves on to talk about a movie that he watched (not included in extract).

Although word searches happened with friends as well, they tended to occur with very different types of hesitation displays. In the following example, also from the dyad data, M14 emits a hiss in line 1 as he embarks on a sequence trying to recall the name "Tweety." The hiss is sequenced with gaze aversion (looking down). After a sentence fragment in line 2, he then averts gaze again (line 3) and rubs his chin as he tries to remember the name of the cartoon. The hiss is thus packaged as one feature of a multimodal display of word searching. The interlocutor appears to orient to him holding his turn by smiling and maintaining gaze.

(9) Dyad Recordings (Tweety retelling)

1 M14 씁

ssup m14 +gazes down+



2 M14 이게

ikey "this one" m14 +lifts gaze; raises left arm+



3 M14 [1.5 s pause] m14 +gazes over interlocutor's head; touches face+



- 4 M14 아이애니메이션 그걸 내가 이름을 알았었거든 *a i aynimeyisyen kukel nayka ilumul alassessketun* "ah I used to know the name of this animation"
 - m14 +gazes at interlocutor; points at interlocutor+



In sum, hisses for marking word searches occur at similar frequencies with superiors and friends. However, the examples shown here demonstrate that the contexts or activities where these hisses are occurring can be qualitatively different. Word searches can function as ways of avoiding the provision of a specific answer, which may occur more frequently in interactions with superiors. On the other hand, the recollection of details can become a fun and interactive pursuit with intimate friends.

Conveying Skepticism

Finally, we look at conveying skepticism. This is a social action that has not been identified in previous studies of sound objects, and only occurred twice in our data. Both tokens are in the intimate interactions, and both occur in turn-initial position in drama interactions. Despite their low frequency (and their appearance only in the scripted drama data), we kept these tokens in a separate category since they stood out as being qualitatively different from the other actions performed by hisses.

This type of hiss occurs in negative evaluations of the truth value of the previous speaker's utterance. In other words, these hisses are used to challenge the veracity of the preceding interlocutor's statement. In the following, scene from the drama Pinocchio, focal character In-ha asks Ji-hee if she is attracted to Chan-su (line 1), with this question hedged somewhat by the adverb *hoksi* "by any chance." After Ji-hee denies this (line 2), In-ha hisses (line 3), before providing evidence for her suspicions (line 4). Line 5 is a repetition of the original accusation in line 1, only this time the accusation is upgraded by the use of the-*ci*

ending, which expresses a high degree of epistemic commitment to its truth value (Lee, 1999).

(10) TV Dramas (Pinocchio)

1 IN-HA 너혹시 찬수좋아하냐? ne hoksi chanswu cohahanya? "Do you like Chan-su by any chance"? in-ha +narrowed eyes; nose wrinkled+



2 JI-HEE [2s pause] 아닌디 aninti

"I don't"

ji-hee *head downwards, but maintains eye contact*



3 IN-HA 씁

ssup (hissing)

in-ha +tilts head to side; furrows eyebrows+



4 IN-HA 이렇게 무대뽀로 찬수 편 드는 거 보니까 수상해. *ilehkey mutayppolo chanswu phyen tu-nun ke ponikka swusanghay* "it's suspicious that you're always just taking his side"

in-ha +gazes down+



- 5 IN-HA 너 찬수 좋아하지? ne chanswu cohahaci? "You like Chansu, right?"
 - in-ha +makes eye contact; eyes wide open+



In contrast to the other social actions identified in this section which all involve some kind of hesitation, discomfort or uncertainty, this final type of hiss conveys a much stronger stance. The hiss is very long (8 ms) and loud, and accompanied by a head tilt and furrowed brow, both of which can also be used as markers of conveying skepticism. Unlike other hisses that we have looked at which could be somewhat ambiguous and deniable, the social action performed by this hiss is fairly blatant and on-record. It would be difficult for the speaker to deny that she is being skeptical given the salience of the cues that she is using. Moreover, in the utterances that follow, rather than using grammatical markers of uncertainty as we saw with hisses that perform reduced commitment, over the following turns In-ha upgrades her accusations that Ji-hee likes Chan-su. Given the way that In-ha makes these strong on-record accusations (and in front of bystanders), her behavior would be open for interpretation as impolite. Although we only have a very small number of tokens, it seems unlikely that this kind of social practice would occur with a status superior.

DISCUSSION

The analysis has confirmed that hisses do indeed occur more frequently when speakers are addressing status superiors, and has demonstrated through a close qualitative analysis that hisses perform four distinct types of social actions: displaying delay and delicacy, activity shift, word search, and conveying skepticism. The higher frequency of hissing with superiors was attested in two of the three datasets, and all of the social actions except for conveying skepticism were present across all three types of data, confirming the robustness of the findings.

Generally speaking, hisses are occurring directly preceding or during some kind of relational or interactional trouble spot. This trouble spot may be rapport-threatening (as in delay and delicacy hisses, and also skepticism) or conversationally disruptive (as in activity shift or word searches). In these contexts, hisses stop the progression of talk, while allowing the hearer to initiate or maintain their turn. The hisses are often accompanied by other devices that delay talk progression, including *uh/um*-type fillers (examples 1 and 5), unfilled pauses (examples 4 and 7), audible breath intakes (example 4) and lexical repetitions (examples 3 and 8). They are also often synchronized with bodily visual practices such as head tilts (example 10) and gaze avoidance (examples 3, 4, 8, 9) that mark memory retrieval, but which in these sequences may become stylized as markers of uncertainty and delay. We thus see the underlying core meaning of hisses as involving difficulty, uncertainty and hesitation.

By drawing in breath in an audibly loud way, speakers create the appearance that they are going to say something, given that inbreaths precede speech and that louder breath intakes are cues for speech initiation (Jefferson, 1986; Schegloff, 1996; Ishii et al., 2014; Aare et al., 2015). But by only hissing rather than actually saying something concrete, they may also mark their reluctance to perform problematic talk. This display of reluctance can take on politeness functions, particularly in the case of sensitive speech acts, since it shows that the speaker is hesitant to impinge on the hearer. Indeed, this politeness-related function of hesitation is widely recognized in politeness research, dating back to Brown and Levinson (1987, p. 172) and their observation that "umms and ahhs and hesitations ... are the most salient clue to the presence of an FTA ['face threatening act']."

By using hisses and other verbal and nonverbal markers of hesitation, speakers perform a display of reluctance that make their hesitant attitude more conspicuous. Through hissing and performing embodied actions associated with uncertainty, speakers are in effect saying: "Look, I'm being really cautious here, because I know you are not necessarily going to like what I'm going to say next" (cf. Clark and Fox Tree, 2002). Hisses are an effective device for doing this since they are more salient than unfilled pauses (Winter and Grawunder, 2012), or the use of *um/uh*-type fillers (which occur in Korean speech more than 10 times as frequently as hisses, Kim et al., 2021). Their functions also seem to be more specific to um/uh-type fillers, which occur with disfluencies and, in Korean, as backchannels (Kim et al., 2021). At the same time, using hisses may be preferable over adding more lexical politeness markers, the inclusion of which runs the risks of sounding insincere or trite. By stylizing the sound of their breathing into audible hisses (and accompanying it with shifts in gaze and head alignment), speakers find a way to transform what would otherwise be a silent pause into a noisy and altogether more salient type of pause, which is more noticeable to the interlocutor, and more recognizable as a display of hesitation.

Hisses therefore appear to be more specified in their functions than other types of filler-like sound objects in Korean, or potentially phenomena such as sniffs, clicks and swallowing reported in previous research (Hoey, 2020; Ogden, 2020, 2021). However, as with other sound objects, their interactional meanings are ultimately ambiguous and underdefined. As noted previously by Dingemanse (2020), sound objects derive their interactional utility precisely via their ambiguity and their liminal status between speech and mere noise. Sound objects are "noticeable yet off-record, perceptible yet ignorable" (Dingemanse, 2020, p. 191). Hisses work well as politeness markers precisely because the intentions behind the hiss are open to different interpretations, with each interpretation potentially being deniable. A speaker can hiss to avoid answering a question (such as in examples 4 and 8), without needing to put this reluctance definitely on record. If the speaker is challenged for being reluctant to answer the question, they can always plausibly deny it. Just as Ogden (2020) notes for clicks in English, we can say that hisses in Korean are an effective resource for "audibly not saying something." They are a way of being reluctant and hesitant, without actually saying on record that you are being reluctant and hesitant.

The increased frequency of hisses and hesitation displays in interactions with status superiors shows us that speakers are trying to show more care and effort when interacting in situations where social distance exists (cf. Winter and Grawunder, 2012). This additional effort that speakers put into appearing reluctant to perform troublesome speech with status superiors makes sense given what we know about Korean language and culture, with social distance encoded directly in grammaticalized honorifics systems in the language (see Sohn, 2001; Brown L., 2015). Moreover, disagreeing with or causing discomfort to superiors is socially rather taboo (Yoon, 2004). This is not necessarily to say that speakers *are* more reluctant or hesitant when they are addressing superiors, but rather that they are "performing" this hesitation in a more salient way.

This performance of effortful speech is somewhat consistent with previous findings regarding the multimodal way that politeness is expressed toward status superiors in Korean. In terms of body comportment, for instance, Korean speakers have been shown to adopt more erect body positions (Brown and Winter, 2019), which are more effortful than the relaxed postures used with friends. As claimed by Gussenhoven's (2002) "effort code," performing effortfulness can be used by speakers as a strategy for appearing obliging, which lay lead in turn to perceptions of politeness.

Hisses therefore take on politeness-related functions and can become associated with a more hesitant and careful way of speaking that might be more appropriate for addressing a status superior. It should be noted, however, that any politenessrelated meanings communicated by hisses are occurring in a very indirect and context-dependent fashion, particularly given that hisses can also occur in intimate interactions with friends, and/or when the speaker is simply hunting for the correct word (see example 9). They can also be involved in communicating impolite meanings (see example 10 and discussion below). Rather than politeness, it appears that the underlying stance (or first-order indexical meaning, Silverstein, 2003) communicated by hisses is related to difficulty or uncertainty. When used in particular contexts, this leads to the emergence of context-specific meanings (second order indexical meanings) such as hesitancy, reluctance, carefulness, and politeness.

Politeness-related interpretations of hisses may depend in large part on co-occurrence with other politeness-related devices. We saw that hisses for delay and delicacy often appear after the first-person pronominal phrase cey-ka "I-nominative" (examples 3 and 5) which emphasizes a humble stance and which is used when speakers are accepting responsibility (Oh, 2007), as well as other multimodal markers of deference such as bowing and the adoption of a compact body position (example 5). In rapport-threatening speech acts (examples 1 and 2), the speech act itself may be stated with mitigation via the use of non-factive constructions and indirect strategies. Although the content following the hiss may at time feature a decrease in epistemic commitment as claimed by Lee and Lee (2021), we found that it can also contain strong expressions of apology (example 5), for instance, or strong commitments to perform an action, such as offers to redress wrongdoings (example 3).

The fact that politeness-related interpretations of hisses are context-dependent is demonstrated by the occurrence in our data of hisses that convey skepticism. Far from being polite, this is a social action which is open for interpretation as impolite. On one level, these hisses actually have some things in common with the other tokens in our data. They are occurring in disruptive and disjunctive sequences of talk, prior to speakers performing heavily dispreferred and rapportthreatening utterances. However, rather than mitigating the force of the utterance that follows, these hisses seem to emphasize the speaker's skeptical stance toward their interlocutor's utterance and add to the level of impoliteness. Politeness research has shown that even linguistic forms that are heavily biased toward polite meanings such as honorifics (Brown, 2013) or respectful address terms such as Doctor (Bousfield and Johnson, 2007) can be interpreted impolitely when used out of socially normative contexts. In addition, some hisses may not have any specific connection with (im)politeness at all.

It is important to recognize that the findings in this paper were driven by a smaller subset of speakers who are high-frequency hissers, whereas other speakers did not hiss at all. The reasons for this high level of inter-speaker variation are not entirely clear, although it is worth noting that this variation does not exist to the same degree for uh/um-type fillers in Korean (Kim et al., 2021), which suggests that it is something specifically about hisses that is more variable between different speakers. One possible explanation for these inter-individual differences is that despite the ambiguity of hisses, they are still a fairly high-stakes strategy compared with other hesitation options (such as using uh/umtype fillers or unfilled pauses) due to their strong high-frequency component and added saliency. Since any type of filled pauses are known to help listeners make predictions about what is coming next (Clark and Fox Tree, 2002; see Corley and Stewart, 2008), hissing is likely to be quite a strong cue that the speaker is about to say something that is dispreferred. On the one hand, this makes the speaker's polite stance more explicit, but at the same time it also places emphasis on the indiscretion itself. There was also a gender difference in the results with male speakers hissing more frequently than females, although the reasons for this are unclear.

CONCLUSION

The current paper has shown that in Korean it is indeed polite to hiss, at least in some contexts and for some speakers. Our analysis shows that a subset of our speakers manipulated their frequency of hissing depending on whether they were speaking to a friend or to a status superior, particularly when engaging in sensitive and disruptive segments of speech. Our analysis suggests that hisses mark difficulty and uncertainty, which in context leads to meanings such as hesitancy, reluctance, carefulness, and politeness.

Our results demonstrate that the use of hisses appears clustered at certain politeness hotspots. We take this as evidence that hisses have communicative value during interaction. Results from existent research do indeed suggest that nonverbal speech sounds can trigger communicative expectations on the part of the listener, at least in some circumstances. Of some relevance to the current study, Barr and Seyfeddinipur (2010) found that listeners more strongly expected new referents when the speaker used a recognized filler such as *um* rather than a random noise. The finding that listeners associate fillers with new or noteworthy information ties in somewhat with our own finding that hisses occur at dispreferred or disjunctive sequences of talk, in other words, when speakers are saying something that is unexpected and/or conversationally disruptive. Ultimately, however, future research focused on listener perception would be needed to fully ascertain the communicative value of hisses in the expression of politeness-related meanings.

Finally, this paper raises the question of whether the use of hisses in Korean as hesitation devices that have politeness functions is something that is specific to the Korean language. Actually, our findings for Korean tie in well with some (rather isolated) observations on the use of other sound objects for politeness-related meanings in previous studies. Harris (2003) observed that British judges and doctors use fillers and hesitation markers to mitigate their speech, whereas Aronsson and Rundström (1989, p. 497) showed that Swedish doctors use hesitation markers such as *uhm* in pediatric discourse to "soften the doctor's intrusion into the parental authority domain." The use of hissing noises as hesitation markers is reported only for Danish (Fredsted, 2005). Given the relative lack of research into the detailed social functions of nonverbal speech sounds and the multimodal facets of politeness (see Brown and Prieto, 2017, p. 358), more research is needed to ascertain how different nonverbal speech sounds pattern with the expression of politeness-related meanings across multiple languages.

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DATA AVAILABILITY STATEMENT

The datasets presented in this study can be found in online repositories. The link to the repository can be found in the article.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by Committee for the Protection of Human Subjects, University of Oregon. The participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

LB and BW collected the data and the data was analyzed by LB, HK, and BW. LB drafted the manuscript, with contributions from BW and HK. All authors contributed to the article and approved the submitted version.

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