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What Do You Do When You Can't Accommodate?

Managing and Evaluating Problematic Interactions in a Multilingual Medical Environment

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Abstract

This study sought to better understand how speakers react, and what factors predict their evaluations of interaction, when a language barrier renders conventional verbal accommodation impossible. An analysis of conversation self-reports by $n = 30$ medical doctors working in multilingual hospital settings indicated that in these situations, speakers engage with their interlocutor to problem solve, and used their social and affective experiences as a basis for evaluating these conversations. These results underscore the importance of social connection when language barriers render conventional interaction impossible, and highlight how the cognitive and affective functions of accommodation work in concert.

Key words: communication accommodation theory, medical interaction, language barrier

Highlights:

1. In multilingual medical settings, interlocutors' language proficiency can be a barrier to clear transmission of information, which is essential to quality care.

2. When a situation necessitates verbal accommodation but speakers lack the requisite language skills, they accommodate in other ways: they code-switch, seek third-party help, use technological tools, and apologize for difficulties.

3. Many of these "alternative" modes of accommodation emphasize social connection (the affective function of accommodation) in addition to comprehension (the cognitive function of accommodation).

4. Doctors' sense of social connection with their interlocutor and the degree of negative affect they experienced predicted their evaluations of these linguistically problematic interactions.

1. Introduction

In interaction, we accommodate (i.e., adjust our communication for) our interlocutors. According to communication accommodation theory (Dragojevic et al., in press; Soliz and Giles, 2014), such adjustment is proposed to have two primary functions. The first, labeled the *affective function*, is to manage social distance, and by extension interpersonal and intergroup relationships. The second, labeled the *cognitive function*, is to regulate comprehension (Street and Giles, 1982). To date, nearly all research examining the consequences of communication accommodation, even in multilingual contexts, has focused on the affective function of accommodation (for reviews in this context, see for example, Bourhis et al., 2012; Sachdev et al., 2012). In this, researchers have generally assumed that speakers are capable of adjusting their communication as they would like, as a means to achieve their social goals (though for an exception see Simard et al., 1976). However, this assumption does not necessarily hold when language barriers render linguistic convergence difficult to impossible. The goal of this study was to better understand how speakers react, and what factors predict their evaluations of interactions, when those speakers are in situations that necessitate linguistic accommodation for the clear transmission of information (cognitive function), but they are unable to linguistically converge because of a language barrier.

This study was undertaken in a multilingual medical context, where the clear transmission of information is critical to quality care, and the inability to linguistically accommodate one's interlocutor can have serious consequences. Lack of mutual understanding in doctor-patient communication poses very real risks for patient health, as it can lead to misunderstandings about both diagnosis and treatment (Epstein et al., 2005; Watson et al., 2012). Doctors' communication skills are also an important component of their professional identity,

and are linked to perceptions of their competence as medical professionals (Gasiorek and Van de Poel, 2012). Outcomes of interactions, such as those studied here, may influence the degree to which doctors attempt to accommodate future patients or colleagues (per CAT; see below) they may also have implications for doctors' identities and sense of self-efficacy as medical professionals. For both these reasons, it is important to understand how they manage these conversations, as well as what drives their evaluations of these interactions.

Communication accommodation theory (CAT: Giles and Soliz, 2014) offers a framework from which to understand the process and effects of communication adjustment. According to the theory, speakers adjust their communication according to their interlocutors' communicative characteristics as well as their own pursuit of a positive personal and social identity. Generally, linguistic accommodation with fellow speakers (most frequently taking the form of convergence, or making one's speech more similar to that of one's interlocutor) is evaluated positively (Soliz and Giles, 2014), and speakers that are seen to put more effort into accommodating are evaluated more positively (Giles et al., 1973).

The overwhelming majority of research applying CAT assumes that speakers are capable of adjusting their communication if and when they want to, and focuses on the social predictors and consequences of these adjustments. When interactants do not share a common language, or share only a limited set of words or phrases, one speaker may want to accommodate their language to another, but not have the linguistic knowledge or skills to do so. In such a situation, a speaker's *affective* orientation is ostensibly accommodative/convergent, as he or she wants to facilitate a positive social interaction. However, this may be at odds with that speaker's nonaccommodative/divergent *cognitive* behavior, which consists of maintaining use of his or her own language rather than switching to that of the interlocutor, likely hampering comprehension

(due to lack of linguistic skill). Within the framework of CAT, this lack of linguistic adaptation

can, arguably, be conceptualized from the listener's perspective as an instance of

underaccommodation. Underaccommodation is defined as a situation in which a speaker does

not adjust his or her communication enough for the needs of a fellow speaker, assuming the

target interprets it as such (Gasiorek, 2013; Williams, 1996). Such underaccommodative

encounters can be source of frustration and difficulty, and have considerable potential for

misunderstanding and/or communication breakdown. To better understand how speakers handle

these situations, we posed the following research question:

> **RQ1.** *In a multilingual medical context, what interactional or communicative strategies*
>
> *do speakers use when they want to accommodate to their interlocutor, but are unable to*
>
> *do so linguistically?*

In addition to investigating how speakers navigated these situations, we were also

interested in how they evaluated these problematic conversations. Simard et al. (1976) offers a

framework suggesting that negative evaluations of nonaccommodation should be attenuated

when speakers' behavior can be attributed to lack of ability, rather than lack of effort (see also

Gasiorek and Giles, 2012). However, this framework does not specify what factors beyond

listeners' perceptions might predict evaluations. Additionally, this framework focuses on the

listener as the judge; we were also interested in how *speakers* perceived and evaluated these

interactions.

Theoretical and empirical work in both communication and language learning provide

some suggestions for variables that could affect evaluations. First among these is the perceived

social distance between speakers, a variable associated with the affective dimension of

accommodation. Not surprisingly, past research has found that we generally evaluate those we

perceive as close to us more positively than those we perceive to be more distant (Gasiorek, 2014; Watson and Gallois, 2002). Second, because being unable to achieve one's interactional goals can be a source of negative affect (Palomares, in press), this is likely to be a result of the interactions studied here, and may influence evaluations of conversation. Finally, the locus of the linguistic problem might influence evaluations; it is possible that some types of language-related issues could result in more negative experiences than others. With these issues in mind, we posed a second research question:

> **RQ2.** *To what extent do social distance, negative affect, and the locus of the linguistic problem that speakers experience predict their evaluation of a conversation when they are unable to linguistically accommodate to their interlocutor?*

2. Method

2.1 Participants and Procedure

Participants in this study were a volunteer sample of doctors whose work involves use of more than one (non-native) language. They were recruited in 5 area hospitals in Brussels, Belgium, where bilingualism (Dutch-French) in staff is actively promoted by hospital policies, and the patient population requires staff's proficiency in many other, mainly European, languages. In these hospitals, although the professional context ostensibly requires multilingualism, individual doctors' language skills are often lacking. Participants were part of a larger study involving the autonomous language-learning tool Medics on the Move (MoM; see www.comforpro.com), which was designed to address this issue. Those who had agreed on using the online/mobile language application were also invited to participate in follow-up research, which included the questionnaire used for this study. This study focused on doctors whose

primary language of communication (as indicated to us) was French, as this was a majority of respondents in these area hospitals.

Participants were sent a link to an online questionnaire via email. The questionnaire asked participants to describe and evaluate a recent professional interaction in a foreign [for the participant] language that they had experienced that "did not go well, or that posed a problem". To maximize participation, a link to the questionnaire was sent three times, at intervals of two weeks. If participants responded to more than one questionnaire (providing data on more than one problematic conversation), their first response was used for analysis.

A total of $N = 38$ participants provided descriptions of such interactions, which included conversations with both patients and colleagues, using a variety of foreign languages (e.g., Dutch, Turkish, English). After reviewing the descriptions of the medical encounters, we excluded 8 interactions in which the central problem discussed was not attributed to language barriers. This resulted in $n = 30$ participants' reports. Qualitative analyses of the descriptions revealed two primary loci of linguistic problems, from the participants' perspective: issues with *vocabulary production* (i.e., participants cannot find the word they need) and issues with *comprehension* (i.e., participants are unable to understand what the interlocutor is saying).

2.2 Materials and Measures

The questionnaire was originally compiled in English, but translated into French to facilitate participants' comprehension of all items, as this was their primary language of communication. To ensure the quality of the translation, the questionnaire was also back-translated. Item descriptions and participant responses provided in this write-up are English glosses; the French versions are available from the authors by request.

Description of conversation and responses. Participants were first asked to describe the problematic conversation, how they responded to it, and how their interlocutor reacted. These questions were open-ended.

Social distance. To measure participants' perceived social distance from their interlocutor, the Inclusion of the Other in the Self (*IOS*: Aronet al., 1992) scale was used. Participants were asked to select the set of overlapping circles that best represented the relationship between themselves and their interlocutor; this was reverse-coded to create a 7 point measure of perceived social distance, with high scores indicating high social distance

Locus of linguistic problem. Descriptions of the interactions were coded (present/not present: 1, 0) for issues of *vocabulary production* (i.e., doctors cannot find the word they need) and issues with *comprehension* (i.e., doctors are unable to understand what interlocutor is saying or make themselves understood).

Negative affect. To assess negative affect, participants rated how *distressed, irritated*, and *upset* they felt following the interaction (Watson et al., 1988) on a 7 point scale. These items were averaged to create a composite *negative affect* scale (α = .76), with high scores indicating high levels of negative affect.

Evaluation of the conversation. To assess evaluations of the conversation, participants indicated the extent to which they *appreciated the conversation*, and felt it was *satisfying, positive, useful*, and *respectful* on a 7 point scale. These items were averaged to create a composite *evaluation of the conversation* scale (α = .96), with high scores indicating a positive evaluation.

3. Results

3.1 Content of conversations

A qualitative examination of the conversation descriptions that doctors provided confirmed that these situations necessitated the clear transmission of information, but language barriers rendered convergence to an interlocutor's language impossible. Doctors reported on interactions with both patients and colleagues; generally, these interactions involved doctors being unable to find the words they needed, or being unable to understand what their interlocutor was trying to express (and sometimes engaging in extensive code-switching in an effort to address this issue). Their reports underscored the negative consequences that an inability to accommodate can have, and the negative affect this can generate. Participants described incidents in which patients did not appear to understand key information doctors were trying to convey, patients doubted or challenged doctors' diagnoses when they were not able to explain them clearly, and both patients and colleagues expressed irritation and sometimes anger during and following these interactions.

3.2 Interactional Strategies

Faced with an inability to verbally accommodate due to language barriers, doctors employed a number of different strategies to try to accomplish their interactional goals (RQ1). From participants' open-ended responses, it is clear that they have an acute sense of the importance of accommodation in this context. As one participant wrote, "*[Both] feeling welcome and information are essential for making an action or test results less scary. You can read the fear, confusion in someone else's eyes.*" Another stated: "*Because I don't know their language well enough, these people trust me less and think—at the outset—that we're lying to them.*" Not surprisingly, the most common responses were to seek out others' help. In some cases, they asked colleagues with stronger language skills; in other cases, they relied on the patient's language skills (e.g., code-switching such that they had the interaction half in French and half in

Dutch, when this option was available), or asked the patient to return later with another party

(e.g., a spouse) that spoke French. Participants also reported using gestures to communicate, or

electronic translation programs when possible. Some participants made a point of explicitly

apologizing for the linguistic difficulties and/or explicitly attributing interactional difficulties to

language, to make clear to their interlocutor that it was not a professional shortcoming that was

at issue.

3.3 Evaluations

In general, participants perceived a relatively high degree of social distance between

themselves and their interlocutor ($M = 5.53$, $SD = 1.43$), experienced relatively low levels of

negative affect ($M = 2.63$, $SD = 1.41$), and had somewhat negative evaluations of the interactions

they reported ($M = 3.78$, $SD = 1.73$). To explore the extent to which social distance[1], negative

affect, and the locus of the linguistic problem were associated with speakers' evaluations when

they were unable to linguistically accommodate to their interlocutor (RQ2), these variables were

entered as predictors of evaluations in a multiple regression (for zero-order correlations between

study variables, see Table 1). The full model explained a considerable amount of the total

variance in evaluations of communication, $F(4, 25) = 13.96$, $p < .001$, $R^2 = .69$. Social distance

($\beta = -.39$, $p = .008$) and negative affect ($\beta = -.51$, $p < .001$) emerged as significant unique

predictors of evaluations such that higher social distance and experiencing more negative affect

predicted less positive evaluations.

Independent samples t-tests were run to see if evaluations of the conversation differed

significantly based on the nature of the linguistic issue experienced. Evaluations were

significantly more negative when participants reported issues with comprehension ($M = 2.23$, *SD*

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[1] It should be noted that social distance can be both a predictor and an outcome of accommodation

= 1.01; *n* = 6) compared to when they did not (*M* = 4.17, *SD* = 1.67; *n* = 24), *t*(28) = 2.70, *p* =

.012. Concomitantly, evaluations were significantly less negative when participants reported

issues with vocabulary (*M* = 4.09, *SD* = 1.68; *n* = 25) compared to when they did not (*M* = 2.24,

SD = 1.13; *n* = 5), *t*(28) = -2.34, *p* = .027.

4. Discussion

This study took a unique perspective relative to extant CAT research by focusing on a

scenario that previous literature has not fully explored: what people do when a situation

necessitates the clear transmission of information, but language barriers render them unable to

verbally accommodate (i.e., converge) to their interlocutor. Its results emphasize the inherently

social and interactive nature of accommodation, and provide insight into how the cognitive and

affective functions of CAT work together.

First, this study documented the use of several interactional strategies as responses to an

inability to linguistically converge. These included enlisting others' help (either the interlocutor

or a third party), code-switching, using gestures or related nonverbals, and apologizing for the

difficulties. Previous research has documented a range of responses to being the target of both

over- and underaccommodation (see Gasiorek, 2013 for a recent review), but has not examined

strategies used by a *source* that is unable to accommodate adequately. The extent to which

participants' responses to these issues actively engaged the other speaker (e.g., code-switching,

getting the other speaker's help) was striking, highlighting the inherently social and cooperative

nature of accommodation. Because these situations required the clear transmission of

information—and as such, finding some way to reach a state of mutual understanding—the

strategies documented here were considerably more cooperative than those found in previous

research on responses to nonaccommodation, which have included aggression, condescension,

expressing negative affect nonverbally, and confrontation (Gasiorek, 2013; Hummert and Mazloff, 2001; Ryan et al., 2006).

Consistent with the focus on social, interactive strategies apparent in the qualitative descriptions of conversations, this study found that when speakers were unable to make comprehension-related adjustments, they used their social and relational experience in the interaction (i.e., the perceived social distance between themselves and their interlocutor, with lower perceived social distance associated with more positive evaluations) and their affective reaction as a basis for evaluating the conversation. This suggests that even when participants do not and/or cannot fulfill the cognitive function of accommodation, they still (strongly) attend to the affective function, and these efforts influence speakers' evaluations of the conversation.

As in any research endeavor, this study had several limitations. First, its sample size is small, and the interactions reported varied considerably in terms of content and nature. Although this heterogeneity allows us to observe a relatively broad range of communicative strategies used to address language barriers (RQ1), it precludes the possibility of analyzing response patterns to any particular type of situation. It may be, for example, that different strategies are preferred and/or are more effective in response to colleagues compared to patients; these data do not allow us to make these sorts of comparisons or more nuanced claims. Second, the sample was drawn from a fairly specific population—hospital doctors who use one or more foreign languages in the workplace, and who volunteered to complete the survey—and so the generalizability of its findings may be limited. That said, the incidents doctors reported were real interactions (not artificial or researcher-constructed vignettes) in an important context (e.g., Watson et al., 2012), both of which are considerable strengths. Third, this study only addresses doctors' perspectives. What constitutes a problematic interaction is arguably subjective (Gasiorek and Van de Poel,

2012; Giles and Gasiorek, 2013). Although the content of reported conversations suggests that most of the incidents the doctors reported would have also been considered problematic by their interlocutors, we did not measure their responses. As such, these results provide only a partial picture of how these situations are handled and evaluated. Finally, this

Nearly all studies of communication accommodation assume that speakers are capable of adjusting their communication as they would like; this study sought to better understand how speakers respond and what factors predict speakers' evaluations of conversations when clear transmission of information is critically important, but a language barrier renders conventional linguistic convergence impossible. Its results indicate—at least in a multilingual medical context—that speakers actively engage with this issue and their interlocutor to try to mitigate negative outcomes. Concomitantly, speakers look to their emergent relational experiences as a basis for evaluations of these interactions. Thus, when the cognitive dimension of accommodation is compromised, speakers may attempt to compensate for it with extra attention to the affective dimension. Together, these findings underscore the importance of rapport and social connection when language barriers render conventional linguistic accommodation impossible, as well as highlight how the cognitive and affective functions of communication accommodation can work in concert.

With these issues in mind, the results of this study suggest several interesting directions for future work. First, studying discourse data would allow us to examine how, pragmatically, these interactions unfold. This, paired with evaluative data from both interlocutors, could provide insight into what types of interactional moves are most effective or successful when compensating for a language barrier. Second, examining these types of interactions in other contexts—for example, tourism and/or travel abroad, language learning in classroom settings, or

international business encounters—could yield additional compensatory accommodation

strategies, which could be of both theoretical and practical interest. Third and finally, a

comprehensive understanding of compensatory strategies and their evaluative consequences

could provide a starting point for skills training or interventions to address these challenging but

important interactional situations.

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Table 1: Zero-order Correlations Between Study Variables

	Social	Vocab	Comp.	Affect	Eval
Social Distance	1.000				
Locus: Vocabulary Production	-.466**	1.000			
Locus: Comprehension	.462*	-.894**	1.000		
Negative affect	.265	.054	-.008	1.000	
Evaluations	-.652**	.404*	-.454*	-.610**	1.000

Note: Higher scores indicate greater social distance, the presence of problems with vocabulary or comprehension, more negative affect, and more positive evaluations.

* *p* < .05, ** *p* < .001