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Interactional Adjustment:

Three Approaches in Language and Social Psychology

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Abstract

Interactional adjustment refers to people's tendency to adjust, or adapt, their communication behavior in social interactions. In recent years, three distinctive approaches to this topic that have featured prominently in the *Journal of Language and Social Psychology* are communication accommodation theory (CAT), language style matching (LSM), and discursive psychology using conversation analysis (DPCA). In this article, we provide a review of these three approaches, highlighting what defines and distinguishes them, as well as what insights into interactional adjustment each offers. We draw out the connections and points of tensions between these approaches; in so doing, we identify future directions for research on interactional adjustment as a fundamental aspect of human communication, and in the study of language and social psychology.

Keywords: communication accommodation theory, language style matching, discursive psychology, conversation analysis, interactional adjustment, social interaction

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In social interaction, people continuously adapt, or adjust, their communication. This phenomenon, which we refer to as *interactional adjustment*, has been addressed from different perspectives by scholars from a range of disciplines. Two distinctive approaches to this topic that have featured prominently in the *Journal of Language and Social Psychology* in recent years are communication accommodation theory (CAT) and language style matching (LSM). In this article, we review these approaches alongside a third, methodologically and theoretically distinct means of examining interactional adjustment (and interaction more generally): discursive psychology using conversation analysis (DPCA).

Most scholars focus on just one of these approaches to studying adjustment in interaction in their work; as a result, they may not be familiar with the alternative perspectives offered by the others. These approaches differ considerably in their underlying assumptions, and consequently the way that they conceptualize and study interactional adjustment. We believe it is valuable for scholars of language and social psychology to be familiar with what each of these approaches consists of, and what each can (and cannot) offer. In this article, we seek to provide a review of these three approaches with a focus on methodology and an eye to highlighting what insights into interactional adjustment each provides. We also propose that an increased emphasis on naturalistic data, particularly within structures enabling sharing of such data, is an important direction for future work on interactional adjustment.

Other reviews of this topic have focused on definitional issues, mapped out the complex theoretical terrain that seeks to address adjustment, and documented the range of ways that people can adjust their communicative behavior (e.g., Burgoon et al., 2017; Gasiorek, 2016b; Toma, 2014). In contrast, we focus on how these three approaches investigate this phenomenon methodologically, and highlight their different meta-theoretical commitments. To the best of our knowledge, this review is also one of the first to offer an

extended discussion of what DPCA can offer through its detailed examination of the turn-by-turn unfolding of talk in naturalistic interaction. In drawing out the connections and points of tensions that exist between these approaches, we hope to push scholars to look beyond their "comfort zone" and engage with work across these three approaches. In the spirit of open science, we also advocate the establishment of shared corpora of naturalistic data to promote the development of theory and methods addressing interactional adjustment in a grounded, ecologically valid manner.

In what follows, we begin with a short description of the premises of each approach, how each emerged, and the way that each is committed to theoretical and methodological concerns. These summaries illustrate how each approach entails different meta-theoretical assumptions which, in turn, shape their analytic concepts and research aims. How researchers have used each approach to examine interactional adjustment are then reviewed. We discuss points of connection and difference, highlighting a shared commitment to analytic rigor, and a shared engagement with naturalistic data. We conclude with a discussion of future directions, advocating for greater engagement between scholars from different backgrounds, and for developing and sharing corpora.

Theoretical Overview of Approaches

Communication Accommodation Theory

CAT is a theoretical framework that seeks to explain and predict how and why people adjust, or accommodate, their communication in interactions (e.g., Giles, 2016a). CAT developed from speech accommodation theory (SAT), which originated from observations of accent and style shifts (Giles, 2016b). CAT addressed the limitations of scholarship explaining linguistic variation solely in terms of sociodemographic variables by underscoring the importance of social identity to language variation. The theory originally focused on people's adjustments

in language production, but later expanded to address a wide range of communication behaviors. In short, CAT proposes that people's cognitive and affective motivations influence how they adjust their communication in interaction, and interpret the adjustments that other people make. Theoretically, CAT distinguishes between thought and action, and views them as distinct, but related. CAT aims to both explain and predict human cognition, affect, and behavior relating to interactional adjustment, and assumes that these constructs are measurable. CAT is predominately (although not exclusively; see below) a deductive approach to studying interactional adjustment: CAT research has a tradition of using theory to generate hypotheses, and of hypothesis testing in empirical research. Researchers using CAT have adopted a range of different methods to study adjustment in interaction; these are discussed in greater detail in the next section.

CAT has been used to explore communicative adjustment and its outcomes across a range of contexts. Soliz and Giles' (2014) meta-analysis identified 10 contexts of quantitative and qualitative inquiry from studies drawing on a variety of different types of data in CAT research up to 2010: culture/ethnicity, computer-mediated communication (CMC), educational/instructional, family, gender/sexual identity, health, inter-/intragenerational, legal, (mass) media, and professional/organizational, with culture/ethnicity and inter-/intragenerational being by far the most prevalent. In the last 10 years, CAT literature has grown considerably in several of these domains, particularly health (e.g., Watson et al., 2016), family (intersecting with other domains such as religious identity and ethnicity; e.g., Morgan et al., 2020), intergenerational (e.g., Gasiorek & Fowler, 2020), intercultural (e.g., Wang et al., 2015), CMC (e.g., Riordan et al., 2013), and police-civilian encounters (e.g., Giles et al., 2012). More recent research in CAT has also addressed the contexts of language learning and communication in atypical populations (e.g., people with dementia; Baker et al., 2015), and has shown the value of CAT as an educational tool (Chevalier et al., 2020).

Language Style Matching

LSM is a construct that captures the degree of overlap in particular dimensions of communicators' language use. LSM is grounded in the observation that people unconsciously adapt their communication behavior to match, or converge with, their interlocutors'; it focuses specifically on how this occurs in word use. The construct of LSM emerged out of work by Pennebaker and colleagues that quantified word use in (naturalistic) written texts using the software program Linguistic Inquiry and Word Count (LIWC). Much of this work focused on how people used function words (see Chung & Pennebaker, 2007), and LSM grew out of this tradition. As a measure, LSM provides a numeric score that indicates the extent to which two people match in their use of specific classes of words (Ireland & Pennebaker, 2010; Niederhoffer & Pennebaker, 2002).

To date, there is no unified conceptual framework specific to LSM. It has been proposed that LSM reflects interlocutors' shared mental representations of an interaction, and thus their degree of social engagement (Ireland & Pennebaker, 2010; Niederhoffer & Pennebaker, 2002). Empirical research on LSM has included some speculation about its effects and/or causes, correlating communicators' degree of LSM to both cognitive variables and the nature of social relationships for those involved. However, none of this has been formalized in theory. As such, LSM is a construct that is largely defined by its operationalization; it is not a theoretical framework, and there is not a single or widely agreed upon interpretation of what it represents. Metatheoretically, LSM scholarship distinguishes between cognition and action, presumes they are correlated, and considers both to be (quantitively) measurable. Empirical research using LSM typically involves testing hypotheses or addressing research questions deductively, and quantitatively.

Recent research using LSM spans a range of different contexts and corresponding correlates. As just a few examples, researchers have examined how LSM relates to outcomes

in negotiations (e.g., Bayram & Ta, 2018; Ireland & Henderson, 2014; Taylor & Thomas, 2008), performance and group cohesiveness in group-based tasks (e.g., Gonzales et al., 2010), perceptions of supportiveness and affect in different types of interpersonal interactions (e.g., Bowen et al., 2017), and helpfulness and upvotes in online reviews (Liu et al., 2019; Wang et al., 2019).

Conversation Analysis

DPCA is a distinctive approach to language and social psychology. It aims to identify recurrent practices that are mutually intelligible to the communicating parties as (a) building and progressing actions, and (b) establishing joint understanding of who each participant is to the other, in the moment-by-moment unfolding of interactions. Unlike CAT and LSM, DPCA does not focus on communicative adjustment per se. However, as Gasiorek (2016b) noted *recipient design*, a principle established by CA as under-pinning talk-in-interaction basically captures the idea of interactional adjustment. *Talk-in-interaction* is a technical expression that refers to language-in-use in natural settings and highlights its sequential progression and the micro adjustments that can occur as a turn of talk unfolds or as sequences of turns are built.

Researchers examine talk-in-interaction in its rich linguistic and paralinguistic diversity, including non-lexical and non-vocal speech sounds (Keevallik & Ogden, 2020) as well as embodied features of communication such as gaze (Goodwin, 1979), body position (Schegloff, 1998) and more recently, touch (Matthew et al., 2020). Furthermore, researchers attend to aspects of the local ecologies of the interaction, such as engagement with phones and social media (Edmonds & Weatherall, 2019; Robles, et al., 2018) or involvement in complex tasks such as being instructed how to drive at high speed around a race track (Mondada, 2018a).

Emerging from feminist and post-structuralist critiques of social psychology (Henriques et al., 1984) and drawing on ethnomethodology and conversation analysis

(Heritage, 1984), DPCA investigates disciplinary topics (e.g., identity, cognition, emotion) and concerns (e.g., power and persuasiveness) as actions and practices locally situated in talk and interaction as it unfolds (Edwards & Potter, 1992; Tilegã & Stokoe, 2015; Wiggins, 2017) in ordinary, institutional, and mundane settings. DPCA remains agnostic about any underlying cognitive or affective motivations which are, by contrast, presumed as underlying causes in CAT and (more implicitly) in LSM. Rather, in DPCA, knowledge, affect, and power are conceptualized as *accomplishments*, based on people's orientations to who they are to each other, which is displayed turn-by-turn. According to DPCA, shared orientations to each other's knowledge, feelings and agency are how mutually intelligible actions are possible (Stevanovic & Peräkylä, 2014).

Similar to CAT, DPCA has examined social interactions in a broad range of naturalistic and contrived (for the research) settings involving different populations s. There are considerable literatures on interactions amongst children (Butler, 2008) and in atypical populations (Wilkinson et al., 2020). Medical encounters have also been examined from this microanalytic approach (Heritage & Maynard, 2006). Classrooms (especially where there is language learning), courtrooms, news interviews, and workplaces are other settings in which video and audio recordings of interactions have been examined using conversation analysis (Sidnell & Stivers, 2012).

Conceptualizing and Operationalizing Adjustment

Communication Accommodation Theory

In conceptualizing interactional adjustment, CAT proposes that communicative adjustments serve two functions: (a) regulating comprehension and (b) managing social relations, at both interpersonal and intergroup levels (that is, in terms of both individual relationships and social identity). CAT generally positions adjustment as strategic, and something that can be explained in terms of participants' goals as they relate to the two functions of adjustment the

theory posits. As a result of CAT's wide-ranging use across more than four decades, the theory has several different "branches", each of which offers a different perspective on communicative adjustments in interaction, and the consequences that follow from them (for more detailed overviews, see Dragojevic et al., 2016; Watson & Soliz, 2019; Zhang & Giles, 2018; Zhang & Pitts, 2019).

The first, and original, branch of CAT focuses on the extent to which communicators adjust their behavior to be similar or different to their interlocutors'. Such behavioral adjustments are termed *convergence* and *divergence*, respectively. This means of conceptualizing and operationalizing accommodation focuses on objective features of verbal and nonverbal behavior. This branch of the theory also includes the concept of *maintenance*, in which communicators continue their default way of communicating without apparent adjustment "toward" or "away from" their interlocutors'. CAT posits that, in general (although not always), people converge to facilitate comprehension and decrease social distance (i.e., emphasize ingroup membership or interpersonal closeness) and that people diverge to interfere with comprehension and increase social distance (i.e., emphasize a distinct identity or dissociate). Closely related, convergence and divergence can also be motivated by speakers' affect towards their interlocutor. In most situations—although, again, not always—convergence engenders feelings of affiliation, liking, shared group membership, and inclusion, while divergence engenders feelings of rejection, distinctiveness, and/or exclusion. With that said, there are some situations (e.g., convergence in negative behavior during conflict) which may result in feelings of animosity or exclusion. Likewise, divergence may have positive outcomes under specific circumstances; for instance, if a speaker is distressed and talking loudly, their interlocutor may linguistically diverge by speaking softly and calmly to de-escalate the situation and restore harmony to the relationship.

Research in this branch of the theory has been both experimental and observational. Some studies have manipulated (confederate) speakers' communication behavior and observed participants' responses. Other work has analyzed recordings and/or transcripts of naturalistic interactions, both qualitatively and quantitatively. Still other studies asked participants to self-report their language choices and behaviors in particular contexts (e.g., with members of a particular language group, in multilingual environments). Early work in this branch included, for example, studies of Francophone and Anglophone speakers in Canada that examined when and why speakers chose to use their own language (L1) or converge to the language of the other speaker (L2; e.g., Bourhis, 1984).

A second branch of the theory addresses adjustments in terms of "interactive strategies", which are classified by what they address, or what aspect of communicators' desires or needs they focus on (Coupland et al., 1988). This approach labels adjustments that relate to communicators' objective behavior (as just described) as *approximation strategies*; adjustments that are made to manage comprehension are labeled *interpretability strategies*. Adjustments that seek to address more general conversational needs (e.g., topic management) are labeled *discourse management strategies*; adjustments that are made to address power differentials or role relations are labeled *interpersonal control strategies*. Finally, adjustments intended to address communicators' affective needs are labeled *emotional expression strategies* (Watson & Gallois, 2004). A given communication behavior could be classified as one or more of these strategies depending on what communicators aim to do, in context; as such, the same objective behavior could be classified differently in different interactions (or even different points in the same interaction).

Typically, work in this branch involves analyzing recorded (and/or transcribed) interactions and coding for these strategies (Jones et al., 1999). In some cases, these recorded interactions may be purely naturalistic; in other cases, they occur under specific conditions

defined or manipulated by the researchers (with comparisons across conditions). In some cases, researchers' analyses are combined with the ratings from other study participants. For example, in one study, researchers analyzed real-time interactions between people, identifying which strategies were used by each party. Another set of participants who were not part of the original interactions then rated the communication effectiveness of the interactions (Watson et al., 2015).

A third branch of the theory focuses on people's self -reported perceptions of others' communicative adjustments. This approach to studying adjustment examines the extent to which one party's communicative adjustments address another (target) party's needs or desires in interaction, from the perspective of those involved in the interaction. When adjustments are in line with a target's needs or desires, the corresponding behavior is considered *accommodative*. When adjustments overshoot or exceed a target's needs or desires, the corresponding behavior is considered *overaccommodative*. When adjustments are insufficient for a target's needs or desires, the corresponding (adjusted) behavior is considered *underaccommodative*. Finally, open hostility from one party to another is considered *counteracccommodative*. Such behavior may occur between racial or ethnic groups who are in conflict (see Dragojevic et al., 2013), or between individuals in an acrimonious situation (Hewett et al., 2009). Generally – and unsurprisingly – the theory suggests, and research finds, that accommodative communication is evaluated more positively than either over- or underaccommodative communication. How negatively over- and underaccommodation is evaluated is influenced by the attributions that targets make for these sub-optimal adjustments; more positive attributions are associated with less negative evaluations (Gasiorek, 2016a).

Research in this branch has been both experimental and observational. In some studies, researchers manipulate communication behavior (in recordings or transcripts) and

compare participants' self-reported responses to different versions of an interaction (e.g., overaccommodative, underaccommodative, and accommodative). In other studies, participants are asked to recall interactions that they perceived as (non)accommodative, or to report on generalized experiences and evaluations of others' communication.

Research on perceptions of adjustment has also used naturalistic data (i.e., recorded real-world communication) in a number of different ways. Some researchers have interviewed participants, asking for their responses and reactions to text extracts from real-world situations (e.g., from medical charts; Hewett et al., 2015), and drawn conclusions about the (non)accommodative nature of those texts from participants' responses. Some studies provided participants with transcripts or recordings of interactions and asked them to rate the behavior of interactants; participants' ratings were then compared to self-reported perceptions by those interactants.

Language Style Matching

LSM addresses interactional adjustment much more narrowly than CAT. By quantifying the overlap in word use between two language users, LSM indicates the extent to which those individuals' language behavior—more specifically, function word use—is similar. The implicit assumption is that this overlap reflects speakers' adjustments to, or for, one another. In some studies, this overlap in function word use is compared between conditions (e.g., between different dyads) or over time. These studies have demonstrated variability in LSM in different conditions and between different sets of people, suggesting that it does capture a form of adjustment. However, adjustment is presumed (rather than explicitly theorized) in LSM.

Methodologically, LSM consists of calculating a score based on the output of a computerized analysis of interaction transcripts. Because LSM quantifies a degree of word matching between two interactions, studies require dyadic data consisting of spoken or

written language used by participants. The software program used for analysis, LIWC, only analyzes text, so all data must be converted to text-only transcripts for analysis. (Thus, LSM does not address paralanguage or other nonverbal information, such as gesture or use of space). Once data have been converted to written text (if needed), participants' contributions are separated, resulting in a text file for each participant. Each file is then run through LIWC, a software program that provides counts of different categories of word use in each text. Most frequently, LSM is calculated for interactants' use of function words (i.e., particles or non-content words; Chung & Pennebaker, 2007); however, it can be used to examine other types of words as well. In a vast majority of studies to date, LSM examines interactants' overlap in nine non-overlapping categories of function words: articles, auxiliary verbs, conjunctions, high-frequency adverbs (e.g., *very*), impersonal pronouns, negations, personal pronouns, prepositions, and quantifiers (Ireland & Pennebaker, 2010). There are at least three different ways that researchers have calculated LSM to date (see Müller-Frommeyer et al., 2019); all involve calculating a score that captures the degree of matching in these word categories (usually averaging across categories, though occasionally studies consider each category individually).

Researchers using LSM have studied both written texts (e.g., collections of letters exchanged between people; Ireland & Pennebaker, 2010) as well as synchronous interactions, which are recorded and then transcribed for analysis. When they are not using entirely naturalistic data collected from existing records, researchers also generally ask participants in their studies to provide retrospective self-reports of cognitive experiences (e.g., attitudes or evaluations of a person or interaction) in the interaction being studied.

Conversation Analysis

As mentioned previously, the focus of conversation analysis is not interactional adjustment per se. Nevertheless, *recipient design* has been established as a basic organizing principle of

social interaction. Recipient design captures the idea that parties are continually adjusting as talk-in-interaction progresses in order to accomplish actions, promote joint understanding and manage self-other relationships. For example, adjustments are fundamental to turn taking because the next speaker must be attending to what the current speaker is doing; this enables them to project points of possible turn completion so they do not come in too early or too late (de Ruiter et al., 2006; Sacks et al., 1974). When overlapping speech does occur, there are systematic practices of adjustment where conceding or competing for the conversational floor is attentive to the sound by sound progression of speech (Schegloff, 2000).

Speakers can also shape and reform their utterances as they are being produced to attend to local contingencies and the dynamic processes of interaction between the parties. One practice of interactional adjustment that Goodwin (1979) identified is that a current speaker can respond to a lack of recipient gaze by interrupting a turn in progress with a short silence. Once mutual gaze had been (re)established, speakers restarted their interrupted turn by restarting the phrase that had been abandoned.

Recipient design is not only basic to turn taking, but also to the accomplishment of understanding. For participants to an interaction, and for the analyst of it, intersubjectivity can be understood as locally produced with reference to the just-prior turn. A turn of talk shows an understanding of the previous one by how it is responsive to it. One adjustment that can occur if troubles in understanding arise is the initiation of repair. Schegloff et al. (1977) established that there are a set of systematic practices that adjust to and address troubles in speaking, hearing and understanding.

Word selection is another domain or locus where recipient design is visible. It is well-established that people select the form of a word designed to be understood by the recipient. In their classic study of reference to persons, Sacks and Schegloff (1979) showed that speakers select a form that will be understood by the other party to the interaction. If a third

person is jointly known by both parties, reference to that person will be by personal name; otherwise a relevant description that allows recognition can be used (e.g., my sister's best-friend) can be used. In another study of word selection, Kitzinger and Mandelbaum (2013) showed how the use of specialist vocabularies was a practice for constructing territories of knowledge. An expert can presume understandings of technical terms or not, and a recipient can accept that presumption or challenge it. Words and descriptions were thus adjusted based on assumptions about what another party did or did not know.

Because DPCA focuses on the sequential unfolding of social interaction, turn by turn, data are video and audio recordings of people engaging with each other "in the wild." A gold standard for such recordings is that they would occur in the world even if the researcher did not exist. First steps in the analysis of these data are multiple close viewings of the moment by moment unfolding of action and the development of transcripts. In this, researchers use Jeffersonian conventions (Jefferson, 2004) and its multimodal developments (Mondada, 2018b) which capture the sequential unfolding of talk and the body. From these first steps, the researcher can then extend the study by forming collections of a phenomenon that enable discoveries about how particular actions are built and understood. They can also develop detailed case studies that illuminate how a single interaction functions to accomplish an action and intersubjective understanding amongst the parties.

A generic research question for DPCA is, "Why that now?" DPCA has systematic procedures for grounding answers in the detailed sequential unfolding of talk-in-interaction. For example, a fundamental criterion for establishing the legitimacy of a finding is that there is evidence that it captures what is relevant from the perspective of the parties involved in the interaction (Schegloff, 1997). The rigor of sequential analysis is that it leads to robust, reliable findings (de Ruiter & Albert, 2017). In published work, claims are supported qualitatively, through the use of data extracts that have been transcribed using established

conventions that capture the interactional specifics of talk including silences and overlapping talk (Hepburn & Bolden, 2017; Jefferson, 2004) and embodied aspects of talk-in-interaction (Mondada, 2016). Presenting extracts transcribed in detail also opens the data in its rawest possible form to the scrutiny of others.

Points of Connection and Difference

We now turn our attention to points of connection and difference across these approaches to studying interactional adjustment. An important overarching similarity is that all three approaches have a strong commitment to analytic rigor in examination of empirical data. Additionally, and importantly, researchers using each approach examine naturalistic data. However, the ways the adjustment is theorized, the way data are analyzed, and the conclusions that researchers subsequently draw, have a number of differences across the approaches.

Both CAT and LSM treat thought (i.e., cognitions such as motivations, attitudes, and beliefs) and action (i.e., communication behavior) as resources that researchers can draw on in the study of interactional adjustment. In CAT, psychological factors are reasons for interactional adjustment. While LSM in and of itself only addresses behavior (i.e., word use), studies using the construct frequently examine relationships between LSM and variables that address interactants' thoughts (e.g., attitudes, evaluations). Thus, implicitly or explicitly, both CAT and LSM presume that thought and action are linked, and that one can be used to elucidate the other. This contrasts with DPCA, which views adjustment as related to the sequential nature of talk in interaction. Influenced by ethnomethodology, DPCA approaches psychological phenomena such as cognition and affect as interactional accomplishments rather than internal or explanatory phenomena.

These theoretical commitments have methodological consequences. Researchers using CAT and LSM often derive hypotheses about communicative adjustment and test them;

in contrast, scholars using DPCA ground their observations and claims in a detailed analysis of participants' displayed orientations and concerns, asking *why that now*. These differences are also closely related to differences in the types of data researchers engage. While DPCA scholars almost exclusively examine naturalistic interactions, CAT scholars examine a wider range of possible data, including both naturalistic and manipulated communication behavior, as well as self-reported attitudes and evaluative ratings of others' behavior (e.g., Platt & Weber, 1984). This diversity of data types reflects CAT's interest in how individuals perceive and respond to communication at both micro (turn-by-turn; see Coupland [1980]) and macro levels. Researchers using LSM typically analyze naturally occurring language use (like DPCA scholars), though they are also comfortable analyzing language used in situations that are manipulated or fabricated by researchers (which DPCA scholars would not do). Similar to most CAT studies, LSM studies also typically—although not always—involve some indicators of interactants' attitudes, evaluations, or thoughts. Thus, all three approaches can and do engage naturalistic data, but they differ in the degree and exclusivity of their commitment to it.

Following from the methods and data they engage, each approach offers a different perspective on interactional adjustment. CAT generally addresses this phenomenon at a relatively high level of abstraction; for instance, researchers label extended exchanges or entire conversations as "accommodative" or "nonaccommodative", or as manifestations of a particular strategy. DPCA scholars, in contrast, examine interactional adjustment more concretely, in terms of situated practices occurring as turns and sequences of talk unfold.

These differences are exemplified in a recent analysis presented by Gallois et al. (2016), in which recorded encounters between American police offices and drivers that had been coded by CAT researchers as highly "accommodative" and highly "nonaccommodative" were examined using DPCA. In the accommodative encounter, the DPCA analysis found that

the driver deferred to the officer's authority, asked for permission to act, and complied with requests. In the nonaccommodative encounter, the driver challenged the officer's authority, and refused the officer's requests. The grounded approach of conversation analysis was thus able to flesh out and identify the alignments of the parties with respect to actions that were being captured by the more abstract CAT-based codings of adjustments. Each approach thus provided distinct, but conceptually consistent, insights into interactional adjustment.

Generally, CAT addresses the psychological causes and consequences of interactional adjustment in a way that DPCA does not (and, importantly, does not seek to). DPCA scholars' explanations of interactional adjustment are situated within the local sequential unfolding of talk, and focus on what is being done by a next turn of talk. Because CAT incorporates both thought and action – and corresponding data – it is positioned to make broader and more expansive claims about interactional adjustment than is DPCA, and we see this reflected in the corresponding empirical literature.

LSM occupies an interesting middle ground in terms of perspective: although its input —and thus analytic focus—is quite narrow and specific, its analytic output (i.e., a single number quantifying the degree of matching in the words spoken between two people in a given interaction) is fairly abstract. While potential explanations for what LSM represents have been proposed – with social engagement, coordination, and shared mental representations of an interaction being the primary candidates (e.g., Niederhoffer & Pennebaker, 2002) – researchers invoke these inconsistently, suggesting there is not a theoretical consensus on what LSM represents. This limits the ability of LSM to address causes or consequences of the adjustment it quantifies in the way that CAT can, although empirical work has identified a number of psychological correlates to LSM (e.g., Bowen et al., 2017; Gonzales et al., 2010). In our view, developing a clearer theoretical picture of what

LSM is, corresponds to, and accomplishes is an important direction for future work with this construct.

A final point of connection between DPCA and CAT is an increasing focus on their applications to communication training and intervention. CAT has been applied as an educational tool to explain to health practitioners why linguistic adjustments occur, and how to reduce the occurrence of nonaccommodative adjustments which can result in miscommunication. For example, Williams (2006) used CAT as an intervention tool to improve interactional adjustments between carers and aged care residents. Similarly, Chevalier et al. (2020) developed a training course for pharmacy students based on CAT to show them how to adjust effectively to their patients. DPCA has been applied in similar ways. For instance, Robinson et al. (2016)'s conversation analytic finding that patients responded differently depending on the format of doctor's questions (i.e., using "some" vs. "any") was developed into an intervention and has informed communication training of doctors. Likewise, Stokoe (2014) has developed a model of communication training that uses conversation analytic studies of a given setting to inform what is taught to the professionals in that setting.[1]

Future Directions

While it might be tempting to think that these approaches could be combined into a single framework that could provide a (more) "complete" picture of how interactional adjustment works or is realized, we caution that it is not so simple. These three approaches drawn on different metatheoretical assumptions and commitments that make bringing them together

[1] While LSM has been examined in a range of applied settings (and there is some discussion of using LSM as a diagnostic indicator), it has not been used for interventions or educational purposes. We do not see much potential for LSM in these domains, as LSM addresses word use that is largely outside of conscious awareness and control (Chung & Pennebaker, 2007; Gonzales et al., 2010).

challenging at best. For CAT (and implicitly, LSM), individual psychological factors such as cognition and affect underpin and shape how interactional adjustment occurs. In contrast, DPCA approaches interactional adjustment as a local matter related to the sequential progression of action and understanding, without recourse to internal psychological factors or explanations.

With that said, we believe there is potential to improve collaboration and cooperation across these approaches. Specifically, we encourage researchers to seek out and cite each other's work across – not just within – these approaches, find points of confluence, and share data, especially in the form of linguistic corpora which can be used to validate measures and findings. These approaches can and do complement each other: as highlighted above, DPCA provides a granular, or micro-level, picture of adjustment as a basic principle of social interaction, and insight into *why that* particular adjustment *now*. CAT provides rich theoretical explanations for how and why adjustment occurs (drawing on psychological factors that DPCA does not engage), as well as information about the consequences and outcomes of interactional adjustment. LSM highlights the complex ways word use can be adjusted in interaction, and provides a means to analyze aspects of interaction that are not emphasized, or easily accessible, in traditional qualitative analyses (e.g., function word overlap). We challenge scholars to looking beyond their own approach, acknowledge the relevance of other perspectives, and cite literature across the approaches in their studies of interactional adjustment.

We also encourage scholars to seek out and find points of confluence between these approaches. For instance, researchers using CAT who are interested in exploring how instances of (non)accommodation manifest could look to DPCA or LSM for methodological tools; using such tools may lead to insights that could be integrated into CAT at the conceptual level. To address calls in the DPCA community for improving stability of results,

coding, claims that can be supported quantitatively, DPCA researchers could look to extant CAT research. Furthermore, efforts to more clearly conceptualize LSM, and to develop a solid theoretical framework around it, could benefit from looking to both CAT and DPCA. The former could provide insights into psychological reasons for these adjustments (and indeed, a number of researchers using LSM have drawn on CAT in their theoretical rationales); the latter could indicate how language matching might arise out of local conditions of interaction as it unfolds, turn-by-turn.

Finally, in the spirit of open science, we encourage scholars to consider sharing the naturalistic data they collect (where ethically possible), in both textual and audio-visual formats. Researchers using all three approaches analyze naturalistic data. Consolidating and making these data available to other researchers in the form of corpora would allow scholars from each approach to examine the same interactions from different perspectives, and using different tools. Such work – particularly if researchers take up our challenge to actively engage with scholarship across these approaches – has the potential to promote the theoretical and methodological development of each approach, as such scholarship will very likely underscore and strengthen some points while calling others into question. Sharing data and developing corpora would also increase the body of naturalistic data available to language and social psychology scholars, offering the opportunity for scholarship with strong ecological validity and supporting a culture of collaboration.

Conclusions

Approaching interactional adjustment in theoretically and methodologically distinct ways, CAT, LSM, and DPCA each provide different insights into interactional adjustment. CAT links adjustment to key psychological, interpersonal, and intergroup dynamics underpinning human interaction. DPCA shows how interactional adjustment is situated, and is part and parcel of the accomplishment of joint actions and understanding. LSM research shows that

adjustment is a robust and quantifiable phenomenon even at the (relatively unconscious) level of function word use.

Taken together, CAT, LSM and DPCA also show how ubiquitous and deeply fundamental interactional adjustment is to human communication (see also Gasiorek & Aune, in press). We hope that this review raises researchers' awareness of these different approaches, encourages scholars to engage with research across these different approaches, and assists those interested in the phenomenon determine which approach(es) best fit(s) their interests and research questions. We also hope it can provide some suggestions for further developing each of these approaches by looking to strengths offered by their counterparts, and by promoting the sharing of naturalistic data, in the spirit of open science. Given the centrality and ubiquity of adjustment to interaction, looking ahead, we expect this to continue to be a key area of inquiry among researchers in language and social psychology for decades to come.

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