

Qualitative Approaches to Language in CSCL



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Abstract In this chapter, we discuss qualitative approaches to the study of language and discourse and their potential relevance for CSCL researchers. We begin by overviewing these approaches generally. Next, we discuss how language-based methodologies have historically been used in CSCL. We contextualize two of the more common methodological approaches in the field: conversation analysis and interaction analysis. Next, we discuss two methodological approaches to discourse analysis that have not yet seen wide use in CSCL but that we argue are of relevance to the field: critical discourse analysis and discursive psychology. For each approach, we briefly outline its history, analytic process, and quality markers and provide an illustrative example. We conclude by discussing the challenges and possibilities for using qualitative approaches to language in CSCL research.

Keywords Computer-mediated communication · Interaction analysis · Conversation analysis · Critical discourse analysis · Discursive psychology

1 Definitions and Scope: The Landscape of Discourse Analysis

This chapter introduces the reader to qualitatively-oriented language-based methodologies and methods, specifically those which we argue are either relatively common (e.g., interaction analysis) or less common but particularly promising for scholars in CSCL (e.g., discursive psychology). Generally, language-based methodologies

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include those qualitative methodologies and methods, such as discourse analytic approaches and conversation analysis, which focus on the close study of language, with language conceived of as including modes beyond linguistic/verbal communication. Within the landscape of language-based methodologies, discourse and conversation analysts have long provided perspectives on how researchers might go about studying talk (defined broadly) and texts (also defined broadly) (Jørgensen and Phillips 2002). Given that this methodological area is rather vast, in this chapter we highlight the place of conversation analysis and interaction analysis in CSCL scholarship and then introduce two discourse analytic perspectives (i.e., critical discourse analysis and discursive psychology) that may be newer to CSCL researchers.

Discourse analysis (DA) does not have a single definition and is perhaps best described as an umbrella term that includes within it a range of theories and qualitative approaches focused on the study of language. Within this range of approaches and perspectives, there are also varied meanings of “language” (e.g., embodied interactions, digital discourse, materiality, etc.) and the kinds of “language” that might be conceived of as being relevant to a discourse analytic study. Broadly, discourse analytic approaches focus on the study of talk (e.g., classroom conversations, dinnertime conversations, etc.) and texts (e.g., blog posts, Twitter feeds, Facebook chats, asynchronous discussion forums, etc.) as produced in everyday social life (Potter 2012) wherein language is not assumed to be solely representative of inner thoughts; rather, it is assumed that language is always *doing* something. For instance, stating “will you come with me” is more than simply a stream of words; the way this utterance is structured also makes it a question or invitation to do something. That is, the statement “will you come with me” is structured grammatically in a particular way and this very structuring allows the statement to be heard as a question or invitation. In other words, language is presumed to be performative.

Such ideas related to language are not new, as they can be traced back to linguistic philosophers such as Wittgenstein (1958), Winch (1967), and others (see Lester 2011, for a discussion of the history of discourse analysis as it relates to cognition). In the 1980s, however, there was a proliferation of discourse analytic perspectives across many disciplines that resulted in a range of discourse analytic approaches, including Bakhtinian discourse analysis (Bakhtin 1981), the discourse analysis model (Sinclair and Coulthard 1975, 1992), discursive psychology (Edwards and Potter 1992), Foucauldian discourse analysis (Arribas-Aylooon and Walkerdine 2008), and interactional sociolinguistics (Gumperz 1999), to name only a few. Many of these discourse analytic approaches arose in direct response to the concerns and interests of a particular discipline but have since been widely disseminated and used in multidisciplinary ways. For instance, in the 1980s and early 1990s, discursive psychology emerged as scholars working within social psychology began offering a critique of how language was conceptualized by that field (see Potter and Wetherell 1987, for further discussion). In the past decade, however, discursive psychology has been used within a range of disciplines.

Across the many unique discourse analytic perspectives, there are several shared assumptions (Jørgensen and Phillips 2002). First, as noted above, language is presumed to be performative; that is, it is in and through language that people accomplish things. Language, for example, can be used to make a complaint or to

ascribe a particular identity. Notably, qualitative research writ large often studies people's views, experiences, and perspectives via the language they produce to represent it. Yet, one of the things that distinguish language-based methodologies and methods from some of the other approaches to qualitative research is the orientation to language as performative. This particular focus is one that leads analysts to attend to what the language is *doing*. For instance, rather than researchers simply asking people to talk about their "identities" in an educational context, a discourse analyst would seek to empirically understand how identities are produced in and through language choices. For example, Benwell and Stokoe (2006) did not assume that all internet discussion forums have "newbies" and "regular participants," but instead they analyzed how some people constructed their discourse to identify as and perform the role of a newcomer.

Second, since discourse analysts assume that it is through language that the social world is built, it is perhaps unsurprising that a social constructionist position underlies many discourse analytic perspectives. Thus, across many of these methodological perspectives, the notion of absolute knowledge is rejected and language is positioned as being central to the generation of knowledge (Berger and Luckmann 1967; Burr 2003). Accordingly, language is viewed as constitutive, rather than merely reflective of inner, mental workings. In this way, language is not positioned as being directly correlated with people's mental schema.

Third, while across discourse analytic perspectives views on criticality and critical theory vary, there is a common commitment to critiquing that which is taken for granted and orienting to knowledge as culturally and historically specific. This view of knowledge is consistent with sociocultural approaches that view knowing and learning as culturally and historically situated (Lave and Wenger 1991) and related to issues of power and politics (Bang and Vossoughi 2016).

Alongside these shared assumptions are a set of distinct views on the meaning of discourse, preferred data sources, and analytic foci. Thus, when drawing upon a particular discourse analytic perspective (or conversation analysis, for that matter), it is paramount to become familiar with the assumptions and philosophical underpinnings of that given perspective.

2 History and Development: The Place of Language-Based Methodologies in CSCL

Foundationally in the learning sciences, language and discourse are understood to be the primary mediators of behavior (Vygotsky 1978). In this way, language-in-use shapes how individuals think and do work in the world, even as people's goals and social actions dialectically shape the language they use. Disciplinary learning, then, can be thought of through a participatory metaphor as learning the (linguistic) cultures of a particular domain, where specific terminology, ways of talking, and discourses are a key aspect of such enculturation (Brown et al. 1989; Gee 2007;

Sfard 1998). From this sociocultural perspective, Sfard and Cobb (2014) suggested that discourses themselves may be “the primary objects of change in the learning of mathematics” (p. 547) and learning in general. This is consistent with interaction analytic approaches in the learning sciences, which treat learning “as a distributed, ongoing social process” (Jordan and Henderson 1995, p. 42). Sociocultural and social constructivist approaches agree that discursive and communicative interactions are both vital to and indicative of learning (Gutierrez et al. 1995; Palincsar 1998). Therefore, discourse analytic methods are an appropriate approach to studying learning as a concept.

Within the CSCL literature base, it has been noted that many published studies continue to rely on primarily quantitative methodologies and methods, many of which serve to fragment (for the purposes of coding and counting) talk and text (Jeong et al. 2014). Indeed, there are reasons that such approaches are useful; however, in this chapter, we seek to highlight other less commonly applied methodological perspectives that orient to language in a bottom-up, inductive fashion. Unlike approaches that employ coding or counting of types of utterances (e.g., Chi 1997), the approaches we discuss here seek to situate individual utterances in their larger discursive context. Jeong et al.’s (2014) literature review of methodologies used in CSCL research found that while the field “eagerly embraced” qualitative methods, the majority (86%) of published studies used quantitative methods (sometimes but not always alongside qualitative methods). Significantly, only 8% of published studies claimed to use discourse analytic approaches, interaction analysis, or conversation analysis. Of the studies included in their review, Jeong et al. described 30% of methodologies employed as “loosely defined qualitative analysis” (p. 313), with this “looseness” positioned as a key methodological challenge of CSCL research. Of the qualitatively-oriented, language-based methodologies that have been employed within CSCL, interaction analysis (discussed in detail below) is perhaps the most recognized and utilized.

Similarly, in writing this chapter, we conducted a systematic literature review, focusing on articles published in the *International Journal of Computer Supported Collaborative Learning* from its inception in 2006 through the summer of 2018. We searched the literature using the terms “critical discourse analysis,” “discursive psychology,” and “interactional sociolinguistics,” none of which resulted in any hits. We also searched the literature using the terms “conversation analysis” (40 hits), “interaction analysis” (60 hits), and “discourse analysis” (44 hits). This resulted in 114 unique hits. Many of these articles were commentaries, used qualitative coding-based approaches to discourse, used quantitative approaches to study discourse, or otherwise used discourse analysis as an umbrella term (rather than a specific subform of discourse analysis, e.g., critical discourse analysis). Therefore, we concluded that discourse analysis broadly is a well-accepted methodological approach in CSCL research, but that few empirical published studies of CSCL position themselves explicitly within one specific established discourse analytic approach. While this may indicate that CSCL scholars work productively across multiple approaches to discourse, we see value for CSCL in drawing on the insights from well-defined discourse analytic traditions. Doing so allows researchers to (a) align theoretical and methodological approaches in their research, (b) draw on

existing scholarship to justify claims and generate insights about learners' talk and text, and (c) consider new possibilities for how CSCL scholars might go about examining talk and text—ways that might offer novel insights on constructs of interest to the field (e.g., disciplinary learning, collaboration, engagement). For example, for each approach we will discuss below, a sample research question relevant to CSCL could be:

- **Conversation analysis**—“How can two (or more) people construct shared meanings for conversations, concepts, and experiences?” (Roschelle 1992, p. 245).
- **Interaction analysis**—“What kinds of resources were recruited by students, and how were they deployed? In what ways, if any, was the setting transformed to support students' conceptual agency in mathematics activity and learning?” (Ma 2017, pp. 342–343).
- **Critical discourse analysis**—When and how are learners' political alignments made relevant in their discussion of climate change?
- **Discursive psychology**—In what ways do students' uses of emojis in a virtual reality simulation in their chatroom make learning visible?

Arguably, CSCL's minimal use and familiarity with language-based methodologies and methods are perhaps linked to what Stahl (2015) described as “positivist conceptions of rigor” within the learning sciences more broadly. As Stahl noted, the majority of research tends to rely “upon pre/post-tests of individuals or coding of individual utterances/postings” (p. 338). And, of important note, Stahl highlights how methodologies such as discourse analytic approaches and conversation analysis require “extensive training and adoption of new practices . . . resulting in reports that may be harder for reviewers . . . to assess” (p. 338). Thus, it is our intent within this chapter to offer an overview of several methodologies that, while infrequently used within CSCL, are potentially fruitful.

2.1 Mainstay Possibilities for CSCL: Conversation Analysis and Interaction Analysis

Within CSCL, the use of conversation analysis (CA) (Sacks 1992), and the closely related interaction analysis (IA) (Jordan and Henderson 1995), has been slowly growing. Notably, CA can be conceptualized as a distinct qualitative methodology that focuses on studying talk-in-interaction in everyday (e.g., dinnertime conversations) and/or institutional contexts (e.g., schools). While there are similarities between CA and discourse analytic approaches, particularly DP, there are some core differences. Notably, CA's micro-orientation to the study of talk makes it quite distinct from many discourse analytic approaches that define and study discourse as it relates to broader social conditions or structure. Further, it was distinctively

developed as a standalone qualitative methodology (see Koschmann and Schwarz [this volume](#), for a discussion of CA's ethnomethodological foundations).

More particularly, CA attends to the sequentiality and orderliness of interactions (ten Have 2007). The primary focus of CA is generally to examine how talk is organized and, more particularly, how people interacting go about making sense of a given interaction. CA arose from the field of sociology, with Harvey Sacks and collaborators (Gail Jefferson and Emanuel Schegloff) credited as its originators. The underlying assumptions of CA have been informed by a range of scholars and disciplinary perspectives, including ethnomethodology, linguistic philosophy, and ethnography, among others. Most specifically, Garfinkel's (1967) writing around ethnomethodology has had a significant influence on CA given its attention to the methods people use to manage their everyday business.

Conversation analysts make sense of patterns of interaction by attending closely to conversational structures within a particular interaction, which includes structures such as repair, turn design, openings/closings, etc. Further, it is important to recognize that CA focuses on *talk-in-interaction*, rather than "discourse" broadly conceived. This focus is one that highlights CA's concentration on what talk is doing *in the interaction* rather than what the talk is simply *about* (Schegloff 1999). That is, conversation analysts are particularly interested in the *how* of an interaction (e.g., an interaction may include a range of intonation shifts and significant gaps between conversational turns), not simply *what* is being talked about (e.g., climate change). As such, people who employ CA focus on the details of the organization of an interaction, attending to the function of things such as silences, inbreaths, intonation, emphasis, etc. Accordingly, a specialized transcription system, the Jefferson method (Jefferson 2004) is used that serves to represent not simply what is said but how something is said (see, Hepburn and Bolden 2017, for a discussion of the transcription processes and practices in CA).

Notably, conversation analysts generally favor naturally occurring data rather than data produced for the purposes of research (e.g., interviews, focus groups). The focus on naturally occurring data is aligned with Sacks' (1992) claims that:

If we are to understand and analyze participants' own concepts and accounts, then we have to find and analyze them not in response to our research questions, but in the places they ordinarily and functionally occur . . . in the activities in which they're employed. (p. 27)

CA scholars thus emphasize the value of collecting online interactions or video/audio-recordings of people going about their everyday and institutional activities. This is in contrast to collecting data wherein people are asked to talk about or reflect on their social practices. Nonetheless, some scholars have argued for the value of analyzing interviews when conducting CA studies (see Roulston 2006, for further discussion of this).

To carry out a CA-informed analysis, specialized training and closely working with CA-trained scholars is helpful, as this approach to analysis is generally described as complex. And, similar to discourse analytic approaches in general, the analytic process is not conceived of as a stepwise, linear process. Rather, the

process is inductive and iterative. Nonetheless, Seedhouse (2004) offered a general overview of five general stages of the analysis process, including:

1. An analyst engages in unmotivated looking to identify patterns of interaction without preconceptions (e.g., a specific theoretical framework) guiding their “looking.”
2. Once a key pattern has been identified, an analyst searches the entire interactional dataset for instances wherein this pattern is present.
3. An analyst comes to understand a pattern in the dataset by studying how it is produced and made sense of by interactants.
4. An analyst carries out a line by line analysis of the various instances of the pattern, while also considering deviant cases.
5. An analyst interprets the primary social action(s) produced by/within a given patterns, thereby offering how a pattern relates to the broader interaction.

Historically, the application of CA has centered around hearable (i.e., collected via audio- or video-recordings) and/or viewable (i.e., collected via video-recordings) interactions, with some of the earliest CA studies focused on the analysis of telephone conversations (Sacks 1992). However, CA has now been employed with data collected from a range of contexts, including online contexts (Paulus et al. 2016). In fact, studies of synchronous (e.g., Steensen 2014), quasi-synchronous (e.g., Meredith and Stokoe 2014), and asynchronous (e.g., Lester and Paulus 2011) interactions have drawn upon CA. In a position paper, Giles et al. (2015) argued for the value of a digital approach to CA, noting that while online interactions may look different than face-to-face interactions, CA’s underlying focus on the sequentiality of talk is particularly useful when studying interactions in online contexts. Building upon Giles et al.’s position paper, in a 2017 special issue of the *Journal of Pragmatics* focused on the microanalysis of online data, Giles et al. (2017) noted that as

... the social sciences and humanities are turning to digital phenomena as their substantive objects of interest, it is becoming increasingly clear that traditional methods of inquiry need considerable adjustment to fully understand the kinds of interaction that are taking place in online environments. (p. 37).

Many of the articles within this special issue illustrate how traditional approaches to CA might be adapted to understand social interaction in online contexts. Indeed, there is a growing body of empirical work that has leveraged the analytic tools of CA to make sense of a range of phenomena in online contexts.

2.1.1 Interaction Analysis

In CSCL, IA, which we suggest is methodologically aligned with CA, has become commonly employed. IA, which arguably draws upon some of the analytic tools of CA both implicitly and explicitly, helps to “bridge the gap” between CA and the object of study, learning, which can be a concern for CSCL researchers interested in

using interpretive approaches (Wise and Schwarz 2017). Specifically, learning sciences scholars have often drawn upon IA to study the “interaction of human beings with each other and with objects in their environment” (Jordan and Henderson 1995, p. 39). Historically, much like contemporary CA (Nevile 2015), IA emphasizes the analysis of video data and embodied interactions (see, Barron 2000 and Stevens and Hall 1998, for early examples), with a wide range of research foci including the study of the structure of collaborative partner interactions (Simpson et al. 2017), augmented reality environments (Enyedy et al. 2015), and learning in middle school classrooms (Enyedy 2003), among others. More recently, diSessa et al. (2016) published an edited volume that brought together commentary and empirical examples of how interaction analysis and knowledge analysis might intersect when studying “knowledge in use” (Hall and Stevens 2016, p. 72) and epistemic cognition. While IA has therefore been generative for the study of learning, we believe that other discourse analytic approaches can also target constructs of relevance to the CSCL community and that these approaches may offer new insights on the relationship between discourse and collaborative learning in particular.

3 State of the Art: Discourse Analytic Perspectives of Relevance to CSCL

As noted above, there is a multitude of distinct approaches to DA (Jørgensen and Phillips 2002), with some focused on more “macro”-oriented perspectives to language (e.g., the discourse of racial inequity) and others focused more on micro, everyday interactions (e.g., the way in which “question formulations” make visible how teachers position some students as knowledgeable and others as unknowledgeable). These varied approaches afford researchers analytic flexibility in studying a variety of relevant topics across times and contexts. And, quite importantly, they bring unique theoretical perspectives and positions on the meaning(s) of discourse, data, and analysis.

While we next offer an overview of two distinct discourse analytic perspectives which we position as being particularly useful for CSCL scholars, we do not offer a stepwise discussion of how to design and ultimately carry out a DA study. Thus, what we offer is not comprehensive, but rather highlights key aspects of each methodological approach with the intent of inviting readers to “dive deeper” into studying the philosophical underpinnings and analytic practices of each approach through continued engagement. For indeed, as Stahl (2015) noted, these methodologies do require training and close study. More specifically, we highlight next: (1) critical discourse analysis, which includes a broad range of approaches (Fairclough et al. 2011); and (2) discursive psychology (Edwards and Potter 1992), a lesser known and used methodological approach in CSCL but widely used in other disciplines.

3.1 *Critical Discourse Analysis*

Critical discourse analysis (CDA) is a form of discourse analysis that explicitly seeks to understand the relationship between discourse and issues of power, inequality, and hegemony. It takes as foundational that there exist social inequities and that these inequities are visible in and constituted (to a degree) by discourse. As an approach, it is “critical” in that this approach rejects the idea of “objective” research and instead positions the researcher as a social actor and the CDA as an openly political project (Wodak and Meyer 2001). At the level of theory, CDA typically draws from other critical social perspectives (e.g., feminist theory, critical race theory, Marxism), with Foucault’s (1980) notion of power informing many scholars who take up CDA. Critical discourse analysts are concerned both with the way that social inequality is made manifest in discourse, as well as the role discursive practices have in (re)producing social inequality (van Dijk 2003). This lens is brought to bear in the theory and method of this approach.

3.1.1 **Key Features of CDA**

CDA is comprised of a variety of approaches that are focused on the relationship between discourse and social inequality. Fairclough et al. (2011) identified six families of approaches to CDA, which include socio-cognitive approaches, corpus-based or computer-mediated approaches, critical linguistics, Fairclough’s approach (see Fairclough 1992), a discourse-historical approach (see Wodak 2001), and argumentation and rhetoric. Across these approaches, “discourse” is treated broadly. Discourse can include words, pictures, symbols, gestures, social practices, and meaning-making resources broadly (Fairclough et al. 2011). Discourse is considered one of many social aspects involved in human organization and therefore these other social aspects, like government and law, cultural traditions, and physical spaces, are assumed to both shape and be shaped by discourse.

CDA centers issues of ideology and power, and it is therefore adept at linking the social as manifested at the micro-level (discourses) with the macro-level (sociopolitical and cultural–historical contexts). Therefore, CDA scholars consider both micro and macro discourses in their analyses. Employing CDA in the study of learning would benefit from linking critical social theory to learning sciences concepts (see Esmonde and Booker 2017, for a fuller discussion of how this might be done).

Two of the approaches to CDA are particularly relevant to the CSCL community: the socio-cognitive approach and corpus-based CDA. First, the socio-cognitive approach to CDA (van Dijk 2008) is based on a discourse–cognition–society triangle, in which cognition is treated as a mediator between discourse and social situations and structures, as discourse can only influence the social when it is filtered through individual’s cognition and vice versa (van Dijk 2015). Using this approach to study racist discourse, for example, would involve synthesizing across discourses,

people's underlying ideologies and other cognitive features, and macro-level factors like politics and power (see van Dijk 2015 for extended discussion of this example). This theory of cognition is consistent with many learning sciences approaches (e.g., conceptual change research) and therefore might be particularly relevant to the study of learning. Second, corpus-based CDA allows for analysts to work with large datasets and combine both quantitative and qualitative analyses. In addition, some scholars have argued that a corpus-based approach is one that results in less researcher biases, by engaging corpus-based techniques (Marko 2008).

Analytically, research in the CDA tradition begins with the identification of a social issue or topic to investigate (e.g., education policy reform, achievement inequities, civil rights). The analyst considers how critical social theorists have discussed the topic. They then narrow in on the methods and data that might be most effective for making sense of the topic as their own understanding changes through such reading. Data in CDA studies are as varied as historical texts, multi-modal video data, audio recordings, and the written law. From this point, CDA is quite methodologically flexible, which perhaps contributes to the wide range of approaches that scholars bring to CDA. Notably, CDA is not without critique, particularly given its "top-down" orientation. A CDA approach is one that assumes a priori categories, such as race, gender, and ethnicity, are relevant. In contrast, some scholars have argued that the individuals involved in a given interactions are what makes a particular social category relevant (Benwell and Stokoe 2006).

3.1.2 Quality Markers of a CDA Study

Several criteria have been noted as important considerations for assuring the quality or validity of a CDA study (Meyer 2001). First, the completeness of a CDA study is often considered, with "the results of a study" being viewed as complete "if new data and the analysis of new linguistic devices reveal no new findings" (Meyer, p. 29). Second, accessibility of findings has been noted as important, as this particular criterion takes into account CDA's pragmatic aims of generating findings that can be attended to by the very "social groups under investigation" (Meyer, p. 29). Third, triangulation has been positioned as useful. More particularly, Wodak (1999) noted in relation to triangulation the importance of exploring "the interconnectedness of discursive practices and extralinguistic social structures" (p. 188). Scollon (2001) also pointed to the importance of triangulation in CDA research, stating that "clear triangulation procedures are essential in drawing inferences about observations and in producing interpretations" (p. 181). Triangulation in this sense is understood as potentially involving multiple forms of data and inviting participants to respond to emergent findings.

3.1.3 Example of a CDA Study Relevant to CSCL

Menard-Warwick (2008) took up CDA to analyze social positioning and its relationship to learning in the context of a class for adult learners of English. Menard-Warwick drew on audiotapes of classroom observations as well as audio recordings of interviews she conducted with students and teachers. She used critical discourse analysis to understand power relations in the classroom. Drawing on Davies and Harré's (1990) discussion of *social positioning*, she connected linguistic resources (e.g., claims of knowledge, corrective feedback, interruptions) to identity construction in the classroom.

Grounding her analysis in close examination of several episodes, Menard-Warwick concluded that the teacher and students in the class drew on common discourses about employment and gender in order to position themselves and each other (e.g., as a homemaker). Importantly, students attempted to resist such limiting positions at times. Menard-Warwick, drawing on the literature about language learning, then demonstrated that these positionings affected learning in terms of how it afforded and constrained socialization into the practices that were presented as those of English-language speakers. Such analyses are useful in CSCL approaches that explore issues of socialization and collaborative coordination, as they can make visible how identity, positioning, and power negotiations can afford or constrain learning opportunities (e.g., in group work).

3.2 Discursive Psychology

A related but distinct form of qualitative discourse analysis is *discursive psychology* (DP) (Edwards and Potter 1992). DP is both a methodological and theoretical framework for understanding human activity through analysis of discourse. It focuses on the ways that traditionally psychologized concepts, like attitudes, preferences, and cognition, are constructed, are made relevant, and are deployed in talk and text. In this way, “the issue of cognition is treated as an analytical object (something we study without first making assumptions about what it is) rather than an analytical framework (something we make assumptions about and which then directs what we study)” (Wiggins 2017, p. 5). According to Potter (2012), DP contains three strands: (1) a focus on interview data and repertoires (patterns) in talk; (2) an analysis of how psychological constructs traditionally treated as mental activity can be understood instead as socially situated in talk (referred to as “re-specification” of the construct), and; (3) a focus on the sequential nature and action orientation of talk.

3.2.1 Key Features of DP

Like other forms of discourse analysis, DP calls attention to the nature of talk as constructive (i.e., making visible particular versions of the social world at the expense of others) and constructed (i.e., deliberately designed to function conversationally) (Potter and Hepburn 2008). This approach centers a more relativist worldview (Edwards et al. 1995).

DP considers itself a branch of psychology but notes that “DP is not a threat to psychology, and should instead be regarded as a different way of doing psychology” (Wiggins 2017, p. 6). In contrast to survey and lab-based approaches, DP focuses on the microlevel treatment of talk as situated in interaction. For example, Wiggins et al. (2001) re-specified the psychological construct of “attitudes towards food.” The study of these attitudes, they argue, traditionally has used methods such as having participants taste a food and rate on a numeric scale how full or satiated they are. By contrast, the authors use discursive psychology to analyze audio recordings of dinner-table talk among families. Their findings reveal how speakers *discursively construct* themselves as having particular attitudes toward food in order to perform a social action (such as delicately explaining why an eater has left food on their plate). DP research has also highlighted the social nature of constructs like self-conception of masculinity (Wetherell and Edley 2014), memory (Edwards and Potter 1992), and verbal fluency (Muskett et al. 2013). Taken together, this work shows that DP has been a rather productive method to understand these constructs by embracing the inherent instability of talk, that is, assuming that talk does not reflect what is “true” in a person’s mind, but rather that it *functions* to accomplish something interactionally.

DP thus abandons the idea that people’s talk neutrally reflects underlying mental architecture; rather, the talk (not the mind) becomes the target of the research. This leads to the analysis of a construct (like attitudes toward food) that focuses not on finding the “true” construct as it is *hidden* in the mind, but rather on how the construct is *used* to accomplish something discursively. Therefore, discursive psychologists “do not expect that an individual’s discourse will be consistent and coherent. Rather, the focus is on the discourse *itself*; how it is organized and what it is doing” (Potter and Wetherell 1987, p. 49, emphasis original). To study this, discursive psychologists tend to draw on insights from CA, but with a specific analytic construct (e.g., identity as a vegan; Snejder and te Molder 2009) in mind as the object of study.

3.2.2 Quality Markers of a DP Study

Potter (2012) described a framework for assessing the quality of DP research as being built into the approach itself. He noted that the distinction between “validation,” then, and analysis is a bit blurred, as a central aspect of validating the findings is in attending to the details of the analysis. He also proposed four specific areas for consideration. First, in alignment with its close association with CA, a DP analysis

fundamentally considers the orientations of participants within a given interaction. A key assumption is that all utterances are better understood by considering the preceding turn of talk, as well as the subsequent utterance (Heritage 1984). Within DP, it is argued that by attending to participants' orientations (as made visible in the turn-by-turn sequence of talk), the "interpretative gap" is reduced, as the analyst aims to stay close to the participants' utterances (Edwards 2012). Second, scholars who employ DP intentionally seek out alternative cases and explanations (Potter 2004). In doing so, the analyst aims to intentionally attend to inconsistencies and diversity within the participants' talk (Potter and Wetherell 1987). Third, a DP analysis aims to illustrate coherence (or not) with other researches around similar conversational features, with this practice understood as serving to substantiate and bolster the interpretation (Potter 2012). Finally, a DP study's findings are written in a way that allows for reader evaluation. By thoroughly and transparently presenting how each analytic claim is supported by excerpts from the larger corpus of data, the analyst provides space for the reader to evaluate their claims (Potter 1996).

3.2.3 Example of a DP Study

Lester and Paulus (2011) deployed DP to analyze conversations in a CSCL environment, specifically blog posts students created in a university-level nutrition science course. In a two-week unit on dietary supplements, students were required to make at least one post and five comments on other students' posts before each lecture. Following the lecture, students were required to make at least one additional post and five more comments, intended to have students reflect on what they had learned. They used DP, informed by three broad DP-type analytic questions: "(1) What are the students doing/accomplishing with their language?, (2) How are they constructing their language in order to achieve this?, and (3) What resources are being used to perform these tasks?" (p. 5).

The authors' DP analysis illustrated that students used a variety of discursive devices to manage appearing knowledgeable, such as employing disclaimers (e.g., "I don't know") and following an "academic script" (i.e., using topic sentences and explicitly defining terms). Although the blog post instructions foregrounded students speaking "informally" by focusing on their personal experiences and beliefs, these findings demonstrated that students still oriented to the task as an institutional, school-type task and therefore engaged in school-style discourse. This type of analysis is useful in CSCL contexts in that it demonstrates how students, at the level of discourse, take up learning tasks.

4 The Future: Challenges and Possibilities for Discourse Analytic Approaches to CSCL Research

Although CA, IA, CDA, and DP are methodological approaches that can be illuminating to the study of learning, they have not yet seen wide use in CSCL research. As the relevance of multivocal and multimethod approaches to methodology in CSCL becomes increasingly important for the robustness of the larger CSCL project (cf. Wise and Schwarz 2017), these language-based methodologies have the potential to offer uniquely deep insights on the nature of discourse, collaboration, and learning. While in practice CA has a preference for naturally occurring data, we believe that when interventionist and design-based research contexts are conceptualized as “institutional talk” (Antaki 2011), they remain robust research sites from the a discourse-analytic perspective.

CSCL and these named discourse analytic traditions have a great deal to learn from one another. While both CDA and DP have primarily studied face-to-face interaction, which may be of relevance to many CSCL researchers, studying text-based discourse and computer-mediated discourse has also seen great success in DP (e.g., Goodman and Rowe 2014; Sneijder and te Molder 2009) and is an area of interest in CDA (e.g., Mautner 2005; Weir 2005). CSCL researchers can build on and contribute to these methodologies through increased attention to computer-supported data (Paulus and Wise 2019). With regard to collaboration, these methodologies are particularly well-suited to conceptualizations of collaboration that prioritize the co-construction of knowledge by focusing on group cognition, collaborative knowledge building, and joint engagement in shared discursive spaces (Hakkarainen et al. 2013; Stahl 2007). Taking on these approaches can help with contemporary CSCL challenges of taking on microecological approaches (Borge and Mercier 2019) and can offer the “different methodological approaches [that] are needed to tackle the challenge of exploring and mapping the landscape of CSCL support and to work towards a comprehensive framework of CSCL support” (Rummel 2018, p. 128). Furthermore, CSCL’s rich history of clarifying what is meant by “learning” lends itself to novel insights for these methodologies, refining their conceptualizations of knowledge and discursive change.

Theoretically speaking, some have argued that such interpretive (rather than analytic) approaches are too methodologically rigid to study constructs of interest to CSCL researchers (cf. Wise and Schwarz 2017). We, however, argue that CA, CDA, and DP are useful approaches for studying learning (particularly when learning is viewed as a change in discourse), collaboration (particularly when collaboration is understood to require intersubjectivity as achieved through discourse), learner identity (particularly when identity is seen as a joint accomplishment between a learner and their environment, including other people; Hand and Gresalfi 2015), and other important constructs in CSCL research. In addition, as issues of power and privilege become especially relevant to the learning sciences (Esmonde and Booker 2017; Politics of Learning Writing Collective 2017), as we have illustrated, qualitative language-based methodologies and methods can offer a

rigorous approach to studying the taken for granted and issues of power development. As CSCL research continues to engage with emergent phenomena of interest, we envision qualitative language-based methodologies and methods playing an important role in unearthing new understandings of constructs of interest to the field.

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Further Readings

- Fairclough, N. (2003). *Analysing discourse: Textual analysis for social research*. Psychology Press.
- Fairclough's text, *Analysing discourse: Textual analysis for social discourse* (2003), is particularly useful for making sense of core ideas related to CDA. The text is useful for those

unfamiliar with CDA, as well as those with some level of familiarity, as it offers a pragmatic approach for designing and carrying out a CDA study.

- Paulus, T., Warren, A., & Lester, J. (2018). Using conversation analysis to understand how agreements, personal experiences, and cognition verbs function in online discussions. *Language@Internet*, 15, article 1. Paulus, Warren, and Lester's (2018) article illustrates how CA can be used to study learning in online asynchronous discussion forums, with the authors including online discussion data generated by students enrolled in a nutrition class at an American university. The authors point to how CA can be employed to understand the social functions of three conversational features (agreements, personal experiences, and cognition verbs). More particular to CSCL scholars, the authors argue that CA serves to offer insights about online data that are different from the predominant analytic frameworks that draw upon scripts and scaffolds to online talk.
- ten Have, P. (2007). *Doing conversation analysis: A practical guide* (2nd ed.). London: Sage Publications. To become generally familiar with CA, ten Have's text, *Doing conversation analysis: A practical guide* (2007), is a useful starting point. This text covers a range of topics related to CA, including its history, core features, and ways by which to design and carry out a study.
- Wiggins, S. (2017). *Discursive psychology: Theory, method and applications*. Sage. Wiggins' text, *Discursive psychology: Theory, method, and application* (2017), is the premier text that offers a theoretically grounded and pragmatic perspectives on DP. The text includes discussion of how DP compares to other discourse analytic perspectives, as well as key considerations for conceptualizing, designing, and carrying out a DP study.
- Wooffitt, R. (2005). *Conversation analysis and discourse analysis: A comparative and critical introduction*. Sage. Wooffitt's text, *Conversation analysis and discourse analysis*, provides a general overview of discourse analytic methods and CA. It is a useful starting point for those less familiar with the assumptions of language-based methodologies, such as CA and DA. The author writes the text in an interdisciplinary way and provides numerous empirical examples and exercises throughout.