

# Abstract Deictic Gestures-in-Interaction: A Barometer of Intersubjective Knowledge Development in Small-Group Discussion

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This microethnographic study focuses on *gesture-in-interaction* as it occurred in small-group discussions in an informal graduate classroom setting. Through micro-analysis of video-recorded group discussions, the author investigates how hand gestures, particularly *abstract deictic* gesturing, work to create and maintain intersubjective and collective knowledge among participants in small discussion groups and examines the role of gesture in developing socially-constructed knowledge. The author compares hand gestures in two distinct student groups, stressing the significance of context in understanding how gestures function in meaning-making processes, and suggests implications for course planning and instruction to increase the potential of these features in fostering the development and maintenance of socially-constructed knowledge in the classroom context.

## Introduction

The idea that knowledge does not exist independently of knower but is constructed within any given context through social interaction has been deeply influential in the field of education over the past two decades (Vygotsky, 1978; Wertsch, 1991). Within the discipline of the language arts, formation of small discussion groups as in, for example, Book Clubs (Calkins, 1986; Harwayne, 1992; Routman, 1991) or Literature Circles (Daniels, 1994; Harste, Short, & Burke, 1988; Peterson & Eeds, 1990) can be seen as one of the myriad classroom practices that have evolved out of this widely accepted social constructivist paradigm. In a course on Adolescent and Children's Literature designed for masters-level students in the Elementary Education Program at a Graduate School of Education, where I was a graduate-student teacher's assistant (TA), small student-centered literature discussions were an integral part of the course, with four out of the fifteen classes devoted to Literature Circles centered on student-selected texts.

From the first, I was struck by the variability in the quality of discussion of these small-group sessions, and in an informal student survey at the end of the semester, several students commented that the teacher-led, whole-group conversations had been a more effective use of class time than the small-group, student-

centered discussions. The second semester when I taught the course, I decided to study the small-group discussion sessions, drawing upon micro-ethnographic techniques, to observe more closely what was happening in these small-group discussions and to better understand how to facilitate them in ways that might provide a more satisfying experience for students. I began the study without any preconceived notions of what aspects of the conversation to analyze, but gesture quickly emerged as a salient and variable feature in the video-taped sessions of the small-group literature discussions. To analyze the array of gestures I was observing I drew upon literature in the burgeoning field of Gesture Studies.

The study of gesture stretches back to the 17th century (Duncan, Cassell, & Levy, 2007, p. 13) and covers a complex range of behaviors from sign language to pantomime and dramatic oratory to, more recently, the gesticulations used in everyday *speech-in-interaction*. It is commonly acknowledged that gestures differ widely from culture to culture and even from individual to individual. In recent decades, there has been an increased interest in gesture, not as a paralinguistic element of communication, but as an integral part of utterance that, in important ways, makes thought visible (Kendon, 2004; McNeill, 1992). If gesture can be understood as an active part of speech utterance, extending thought out into the visual field of the listener, it seems that gesture might also make visible the processes involved in the development of socially-constructed knowledge in small-group discussion, and this is what I set out to examine, using video-taped data of Literature Circles.

The primary goal of this microethnographic study was to understand what role gesture played in developing socially constructed, intersubjective knowledge in the small-group discussions. My primary research questions were as follows: (a) What types of gesture were being used and what communicative purposes or activities were they supporting?; (b) Did the absence, or infrequency, of gesture suggest an absence or infrequency of these activities, or were these activities being accomplished by other means?; (c) What factors enhanced or inhibited gesture, and how might these be manipulated to increase the successful development of intersubjective knowledge among group participants? While conversation has often been considered the logical focus of attention within the field of socio- and educational linguistics, it is clear from looking at the role of gesture-in-interaction that connections among ideas in small-group discussions are accomplished by far more than speech alone (Goffman, 1981). This paper seeks to make a contribution to these fields by attempting to identify how speech and gesture work together to create intersubjective understanding among group participants.

## Background

The small-group discussions analyzed in this study occurred as part of a graduate-level course in Children's and Adolescent literature. At the beginning of the semester, students signed up for a series of small discussion groups, centered on a novel of their choice (out of four choices) within a given genre. Underlying assumptions were that, through these discussions, students would develop socially-constructed knowledge and appreciation of the readings, and learn, as pre-

service teachers, to facilitate such discussions in their own classrooms. Initially, I had served for a semester as a TA, assisting the professor who had designed the course,<sup>1</sup> but in consequent semesters I taught one of the sections. Although course readings and design were fairly predetermined, I had freedom to frame the discussion groups and to design activities the groups engaged in around their chosen novel however I saw fit. All of these considerations, as it turned out, seemed to impact both the prevalence and variety of gestures, and the level of intersubjective knowledge the groups developed in this context. My goals were to make this as student-centered as possible, so, while I did not assign roles to the groups, I did ask students to email me their own questions about the readings prior to each session. I would then compile the questions into a handout for each group to be used in their discussion.

In the Spring of 2009, there were 23 students in the course (19 females and four males) and the majority were master's candidates in the Elementary Education Program. Of these students, only one requested not to be videotaped. Although small-group discussions occurred in every class, the Literature Circles centered on students' novel choices were built into four sessions out of 15 total sessions. For each of the four video-tapings, I requested that the group volunteering to be filmed sitting in a place where I could set up my camera. In the analysis that follows, I also discuss how the gender makeup and seating formation of the groups (e.g., in a circle or line) seemed to significantly impact the freedom and visibility of gesture-use in the small-group discussions.

Our assigned classroom for this course was an added constraint on the filming and on classroom organization because it was not big enough to comfortably hold four small-discussion groups or even one large discussion group in a circle formation. When I asked for a larger classroom, I was informed that the room was built to hold 30 people, by which I could only assume it was designed for lecture-style classes. This space was certainly not built with the social constructivist paradigm of education in mind, as described at the outset of this paper, where students and the instructor could freely form discussion groups in a variety of formations or to engage in other activities, such as dramatizations. I consequently allowed one or two of the groups to find other locations for their discussions, either in the hallway or lobby of the building, so as to reduce distraction and to improve the sound quality in such cramped quarters. As gesture became the salient feature of my analysis, I began to notice how types of gesture and their use varied across different contexts, depending on large-group or small-group arrangements, and according to whether participants were facing one another or not, leading me to wonder how much these structural factors may also encourage or impede the development of intersubjective co-constructed knowledge among classroom participants.

### Literature Review

As David McNeill writes in *Hand and Mind: What Gestures Reveal about Thought* (1992), for many decades after World War II linguists treated gesture, along with "prosody (voice pitch and loudness), posture, facial expression...as analogical signals and thus *paralinguistic*—beside language" (p. 4), but McNeill set out to revolutionize

this “traditional view” and his own field of psycholinguistics by arguing that “gesture is actively part of utterance” and indeed an extension of thought (p. 4). To systematize our understanding of the broad range of behaviors that fall under Gesture Studies, McNeill developed Kendon’s Continuum (after Adam Kendon) to specify the type of gesture under study in relation to speech. At one end of the continuum is *gesticulation* where speech is *obligatory*, and at the other end is *sign language* where the absence of speech is *obligatory*. McNeill further refines this method of classification by separating out four continua, which cover gesture in relation to speech (Kendon’s Continuum), gesture in relation to its linguistic properties, gesture in relation to convention, and finally, gesture in relation to semiosis (McNeill, 2000, pp. 2-5).

Before embarking on any examination of gesture, it seems imperative, given the broad range of possibilities, to specify what kind of gesture will be the focus of discussion and where these gestures fall on the various continua. For this paper, I look specifically at hand gesture as it occurred in small-group discussions in an informal classroom setting. The gestures I examine are gesticulations on the far left of all four continua, meaning that they are characterized by the obligatory presence of speech (although the data provides notable exceptions to this rule), they are absent of their own linguistic properties, they are not conventionalized (and, in fact, vary from participant to participant), and they are *global and synthetic*, to complement the segmented and analytic utterances with which they co-occur. In other words, they work to enhance the activity of the spoken word in some way. According to McNeill, gesticulations of this sort are the “unwitting accompaniments of speech” (1992, p. 72). Additionally, McNeill and Duncan claim that “co-expressive speech-synchronized gestures open a ‘window’ onto thinking that is otherwise curtained. Such a gesture displays mental content, and does so instantaneously, in real time...” (2000, as cited in Kendon, 2004, p. 99).

Not surprisingly, the gesticulations that commonly occur in everyday speech-in-interaction have been further classified in various ways, in one instance by Marianne Gullberg (1998), who builds upon McNeill’s work to suggest yet another continuum, ranging from non-representational *beats* (or rhythmic gestures that seem to assist thought but do not convey meaning) at one end to *iconic gestures* at the other, and with *abstract deictic gestures*, *metaphoric gestures*, and *concrete deictics* in between (Gullberg, 1998, pp. 94-6). When it comes to speech, deictics commonly refer to words, such as *this* or *that* or pronouns like *me* and *you*, which only take on meaning within a context of use. In the literature on gesture, the term *deictic gestures* is often used interchangeably with *pointing gestures* since some form of pointing often accompanies or replaces the spoken deictic, and the referent is understood because of a shared spatio-temporal setting.

While examples of gesture along the whole range of this continuum were evident during the course of the small-group discussions, the specific gestural feature I will be analyzing might best be characterized as interactive abstract deictic gestures, because the participants point to other members of the group as “referents in gesture space” (Gullberg, 1998, p. 140), or as the embodiment of earlier ideas, to which the current speaker/gesturer wishes to respond, expand or elaborate upon, or (re)align. As Gullberg points out, through the use of abstract deictics, “gesture space becomes symbolically charged with discursive meaning, and gesture space in fact turns into a map of discourse and of the narrative located along a horizontal

plane" (1998, p. 141). I would argue, however, that the gestures I will examine fall somewhere between abstract and concrete deictics because they point specifically at people, not as concrete entities unto themselves but as embodiments of the abstract ideas associated with them (for analysis of grammatical features that accomplish a similar kind of symbolic embodiment, see Ochs, Gonzalez, & Jacoby, 1996).

Gullberg notes that "at the para-narrative level...deictic gestures indicate the relationship between the speaker and interlocutor" (1998, p. 131). In other words, they both create and maintain a shared mental map of discourse between speaker and interlocutor, and she illustrates this with a category of *deictic listener gestures* (p. 183). Deictic listener gestures may account for some of the interactive abstract deictic gestures in the data that, as we shall see, were not accompanied by speech, and that I describe as *wordless alignment*. To make sense of the actions or work that such gestures accomplish in establishing "the relationship between the speaker and interlocutor," I also draw upon Erving Goffman's concept of *footing*, and how footing shifts occur among participants involved in what he terms "participation frameworks" (1981, p. 140). Many of the abstract deictic gestures I analyze in this paper can be viewed as accomplishing shifts in footing or establishing alignment with other participants. As Goffman writes, "A change in footing implies a change in the alignment we take up to ourselves and the others present as expressed in the way we manage the production or reception of an utterance," and he goes on to add, "change in footing is very commonly language-linked; if not that, then at least one can claim that the paralinguistic markers of language will figure" (p. 128). While Goffman, unlike McNeill, would categorize gesture as "paralinguistic," he does recognize that the work of alignment and elaboration involves more than "ordinary conversation" between a "speaker" and "hearer," and that within a "ritualized participation framework," such as a Literature Circle, participants draw upon much more than language - sight, gesticulation, touch - to accomplish the task at hand (p. 129; see also Goffman, 1964).

When it comes to gesture, Goffman is careful to use the term *gesture communities* (1981, p. 134) to indicate how culturally and context bound gestural conventions are. Kendon argues that it is perhaps best not to think in terms of establishing a "single universal system" for gesture but rather to develop locally useful "devices" to characterize gesture in any given circumstance (2004, p. 107):

Humans have at their disposal the *gestural medium*, which can be used in many different ways and from which many different forms of expression can be fashioned. What forms are fashioned will depend upon the circumstances of use, the communicative purposes for which they are intended, and how they are to be used in relation to other media of expression that are available.

This seems especially relevant when I turn to a different group of students in a similar informal classroom discussion but in a different setting, where these same kind of interactive, abstract deictic gestures seem impeded both by the other objects (books, pens, papers, soda cans!) at their disposal, by their seating arrangement (at individual desks, arranged in an irregular C, or J-shape, rather than in a circle around a shared table), and even possibly by the gender make-up of the group. By comparing these two separate circumstances, we can see how difficult

it is to develop a universalized scheme that would apply in every situation with every group of participants, even when the communicative purpose of their interaction would appear to be the same.

### Methodology

In addition to the notion of footing, another concept that emerged as particularly important in this setting was Goffman's analysis of *framing*, or the way in which a group of participants orients in focused interaction around what they agree to be a common goal (Goffman, 1974; Kendon, 1992). The first small-group discussion (Group A), the principal focus of my analysis, occurred in week eight of the course when the genre under discussion was fantasy, and the novel of the group that agreed to be filmed was the premise fantasy *Tuck Everlasting* by Natalie Babbitt (1975). This group's discussion became the main focus for my analysis because the gestures I observed were the most varied and explicit for several possible reasons that will be developed in the discussion to follow. Drawing upon one of the activities presented in the theoretical readings the students had done that week, I asked the groups to *individually* do a visual mapping of the novel *before* beginning their group discussion. This group of six (three men and three women) reframed my instructions to mean a *group mapping* of the story to be accomplished *during* the course of the discussion and turned in to the instructor at the end of the session. It should be noted that this was the only group among the four literature discussion groups that framed the activity in this way.

For the first half of the discussion, the group oriented toward developing ideas that they might use for their group mapping. For these ideas, they drew upon the handout of discussion questions, which they had generated and submitted to me before class, and they also referenced their copies of the book, especially the cover illustrations. These interactions with objects involved what Gullberg (1998) might call concrete deictics, pointing at actual objects. Once the mapping activity began, the gestural feature I observed in the first part of the discussion, where students actively referenced each others' ideas through various forms of abstract deictic pointing, visibly diminished in frequency as the orientation of the group shifted to the piece of paper on the table as well as to what one student, Sean, was drawing. From that point on, the gestures became more concretely deictic as they pointed to the actual lines or words on the paper. It is important to note that this group volunteered to be filmed in the lobby where it would be less noisy; but this also allowed them to sit in a circle around a single table with a clear view of everyone in the group, unlike the classroom where the students sat at individual desks cramped into oddly shaped formations to accommodate other groups in the room. While it was not unusual that a group would choose to work in the lobby, what *was* outside of the routine was their instructor filming them for almost 30 minutes as there was no place in the lobby to set up my clamp-on tripod.

The second group (Group B) provides an interesting contrastive analysis because many of the elements that seemed to encourage the gestural practices of Group A were absent in the case of Group B. Group B was made up of five women, and their discussion took place within the crowded classroom setting. This time, I was able to set up a camera tripod so that I did not have to hold it

for the duration of their conversation, which took place in two, approximately 20 minute segments, and it appeared that at points in the conversation they forgot that the camera was there (as when Bev reminded Carla that she was “on camera”). Rather than sitting in a circle around a single table like Group A, these women sat at individual desks formed in an irregular C-shape, and later in a J-shape, with three of them sitting side-by-side against the wall and two chairs pulled out into the room to face them. This, combined with the cramped space of the room made it impossible to film everyone at once as I was more-or-less able to do with Group A.

With Group B, filming took place in week 10 of the course when the genre under study was realistic fiction, and Group B was discussing E. L. Konigsburg’s *The View from Saturday* (1996). Not only did most of the women in Group B hold their own copies of the book and frequently leaf through them for references, they also held pens and had piles of notebooks and other objects in front of them. Like the first group, they were given a list of their own individually generated group discussion questions, which they also referenced at various points in the tape. I had asked them to engage in a short individual pre-discussion activity, but like Group A, they reframed this as a group activity.

In the second segment of the tape, they were asked specifically to create a poem as a group that would represent the book in some way to the larger group. They decided to develop a haiku poem, but, interestingly, unlike in Group A where two members drew the mapping and only one was designated the official mapper, in this instance, all five women actively engaged in writing down the poem as it developed. Although it was ostensibly a group-activity, they approached it as a set of individuals, and this, among other factors, seemed to have an impact on the kinds of interactive gestural features, as well as the different communicative purposes, of Group B in contrast with Group A.

### Analysis and Findings

In *Gesture: Visible Action as Utterance*, Kendon mentions the “*Interactive or interpersonal functions of gestures*,” under which he includes examples such as, “a way of indicating to whom a current utterance is addressed, to indicate that a current speaker...is...still claiming a role as speaker, and gestures that regulate turns at talk” (2004, p. 159). In a footnote he adds that these functions “have often been acknowledged...but a systematic discussion seems lacking” (ibid.). Although a systematic discussion of interactive gesture is outside the limitations of this paper, I would like to examine instances of how interactive gestures occurred in small-group discussions not just to indicate to whom an utterance is addressed or to regulate turns at talk, but also to indicate alignment with or elaborate upon expressed ideas, and to reference and reintroduce earlier ideas into the conversation. I call these *interactive abstract deictic gestures* because various forms of pointing do the work of connecting the current utterance to *that* earlier utterance or idea. In what follows, I will examine through specific examples the kinds of work—alignment with, elaboration on, and interweaving of ideas—these gestures can be seen to have accomplished in Group A, followed by a contrastive analysis of how these same features functioned in Group B.

Group A: Abstract deictic alignment and elaboration

In several cases the verbal deictic *that* was explicitly expressed along with the gesture, and sometimes it was only implied. For instance, in Group A, to follow-up on a point Sean had just made about using the book as a read-aloud in an elementary classroom context, Ed used his pen to point at Sean each time he said the word *that* (see lines 17 and 19, and Figure 1).

- 16     **Sean:**     But then again (.) it's like really beautifully written too [(.) so it's like [(2)  
 17     **Ed:**             [*right*]     [on **that** note]  
 18     **Sean:**     you want to share it with the students  
 19     **Ed:**             then on **that** note (.) **that's**<sup>2</sup> why I would suggest that it would be better to read just  
 20                     because the language (.) just listening to it (.) I don't think you can take it all in or really  
 21                     like appreciate it



Figure 1. "On **that** note"

The deictic *that* in this instance referred to Sean's earlier utterance, but Ed pointed his pen in Sean's direction, as if Sean were the embodiment of his idea or as if Sean's utterance were now an object in Sean's immediate vicinity to which Ed could respond, and then extend or reshape. Similarly, Beth used her whole hand with palm facing upward to gesture in Ed's direction both to align with and to elaborate upon his conversational turn (see Figure 2):

- 21     **Ed:**             like appreciate it (.) especially someone with (.) like say they're behind in literacy  
 22                     or [something like that  
 23     **Beth:**             [yeah (.) well **that's** why we're going to read it (.) the plan is to read it with  
 24                     group five







Figure 5. “you you”

- 211 **Beth:** But the prologue [wrecks it (.) the epilogue (.) I mean the epilogue (.) sorry  
 212 **Dan:** [prologue (.2) you mean the epilogue but maybe the epilogue is=  
 213 **Sean:** [well  
 214 **Dan:** =just the author saying [xxx  
 215 **Sean:** [well no no no (.) the epilogue could be (.2) What I’m saying is=  
 216 **Dan:** yeah (.) exactly (Figure 6)  
 217 **Sean:** =you could fill it with [your(.) you know (.) he.he. your=  
 218 **Dan:** [exactly right  
 219 **Sean:** = ((laughing)) desire for Jessie.



Figure 6. “yeah (.) exactly”

In Figure 6, Dan aligned with Sean, who was encouraging Beth to interpret the book in the way she desired, regardless of the epilogue. Although this situation clearly involved some teasing, the heightened affective involvement of the participants in an aesthetic experience of this book may also have been a factor in their active engagement in gesture during discussion.

*Group A: Weaving the discussion together with abstract deictic gestures*

These interactive abstract deictic gestures were also used to reference earlier tensions between people's ideas and/or to concede a point. Jo-Anne gestured with her whole hand palm facing upward back and forth between her own chest and Dan to reference their earlier argument, and then finally she gestured toward Dan to concede that he may have had a point (see Figure 7):

- 145      **Jo-Anne:**    uh I (.) uh (.4) one of my questions was what was (.) yeah how would the story  
 146                    change if the epilogue had not been included so that you would have to just (.)  
 147                    would be left wondering what her decision was and I thought (.) ((hand  
 148                    gesturing back and forth between herself and Dan)) I mean I thought it was clear  
 149                    what her decision was but **apparently** it's subject to interpretation so  
 150      **Dan:**            ((laughs)) I like that idea



Figure 7. “**apparently** it’s subject to interpretation”

Jo-Anne gestured toward Dan to reference an earlier tension between their ideas and to concede that there might be other possible interpretations, indicating that these interactive abstract deictics not only referred to ideas that immediately preceded them, but could also continue to reference and even reintroduce earlier ideas at much later points in the discussion. In this way, abstract deictic pointing may also function in conversation in ways similar to the role of repetition (Tannen, 2007).

A dramatic example of this happened when Sean proposed an idea for the collective mapping of the story, where he referenced ideas expressed by both Jo-Anne and Kathy earlier in the discussion. Although Jo-Anne had left the group several minutes earlier, Sean pointed in the general direction she left (over his shoulder; see Figure 8) to refer back to an idea she had expressed through a drawing of a wheel. And with his next gesture (see Figure 9), he pointed at Kathy to indicate that Jo-Anne’s illustration was related to an idea Kathy had expressed more than six minutes earlier when she read a quotation about the “Wheel of Life” from the book.



Figure 8. “what what Jo-Anne”

556        **Sean:**        **what what Jo-Anne** (Figure 8) she just left but she had the wheel (.2)  
 557        **Sean:**        That was okay ((Ed and Dan laugh)) just cause (.) **just with that that that quote**  
 558        **Kathy:**        you mean it was a wonderful idea that she came up with



Figure 9. “with that that that quote”

Sean repeated *that* several times (line 557) to draw forth and emphasize the connection he was making to the much earlier references (see Figure 9). Several minutes later Sean used gesture to point at their producers, weaving together connections to earlier ideas that could be made with the book (see Figure 10).

680        **Sean:**        I think using it in the classroom this could bring up so many discussions just about  
 681        eternal life in general or like ((gestures with fingers more explicitly toward Ed and  
 682        Kathy—Figure 10)) **life after death** you know



Figure 10. "life after death you know"

In this instance, it requires having been privy to the whole preceding conversation to know that Sean was making a gestural reference to Ed and Kathy's earlier discussion of morality and life after death, which had occurred at least five minutes earlier. Sean, who in many ways took a leadership role, treated ideas that were formulated during the course of the discussion much like an orchestral conductor would treat refrains in music that could be brought to the fore again at any later point by gesturing in the direction of their producers. It would appear that the producers of ideas continued to physically embody their thoughts long after they had uttered them.

Interestingly, once Sean began to draw the collective mapping of the story, the frequency of these types of gestures decreased dramatically, and the gesturing shifted toward the drawing itself. One exception was when the group was doing a word search, and Ed tried to express a complex concept with one word (see Figure 11):

- 956     **Ed:**        just like patience (.) like sometimes when we're always=  
 957     **Dan:**        yeah  
 958     **Ed:**        =asking for things and wanting things now as opposed to being patient and letting  
 959                   things come (.) you know like everything=  
 960     **Dan:**        ((gestures toward Ed with thumb))  
 961     **Ed:**        =has a time and a place in the cycle of life  
 962     **Dan:**        ((gestures toward Ed with thumb)) my CM always says ask and you shall not receive (.2)  
 963     **Ed:**        ((gestures back toward D—Figure 11)) **yeah (.) exactly**



Figure 11. “yeah (.) exactly”

Dan and Ed gestured back and forth to co-produce shared knowledge of their CM (classroom mentor) for the group. These gestures were also used when information was introduced that had not been previously shared, but with which the interlocutor was ready to align. When Kathy made a point about animal rights, which no one else seemed to have considered, Sean pointed at her twice in two different ways to second her thought (see Figures 12 and 13).

845      **Kathy:**      would you want to be a slave forever  
 846      **Sean:**      ((pointing thumb at Kathy)) *That’s true* (.3)



Figure 12. “That’s true”

847      **Sean:**      ((pointing pinky finger at Kathy—Figure 13)) *I didn’t even think about that*



Figure 13. "I didn't even think about that"

Although, McNeill (1992) and Kendon (1992) would place these kinds of gesticulations on the obligatory-presence-of-speech side of the continuum, there were several points in both group A and B's discussions where the gestures stood on their own and seemed to conform more to what Gullberg calls *deictic listener gestures* (1998, p. 183). This can be seen in Group A, when Ed wordlessly pointed his thumb in alignment with Kathy's idea highlighted in bold (see Figure 14):

103        **Beth:**        I mean you do but you don't (.) because I think the main character of the book (.) the  
 104                    main character is Winnie?  
 105        **Kathy:**        but is she (.) is she the main character or is she just how we see the world through her  
 106                    eyes (.) is she just our eye (.2) like our peephole into their world



Figure 14. Silent alignment or conceding a point?





The most overt use of index-finger pointing in Group B, however, was of particular interest because it introduced a new activity for this feature. When the group was developing their haiku poem, Katie pointed her finger for a full 10 seconds at Carla while she tried to elicit from her a comment she had made earlier (see Figure 18):

756        **Katie:**        wait (.2) I like (.) no no what was your thing in the middle of the turtle line



Figure 18. “what was your thing in the middle of the turtle line”

This use of the feature may be seen as the inverse of the earlier instances where pointing was used to refer back to ideas expressed much earlier in the conversation. Instead of making the connection to Carla’s idea herself, Katie asked Carla to repeat it to be sure the connection she was trying to make was relevant. It is interesting, too, that Katie referred to Carla’s idea as “your thing” (line 756), as if the ideas in circulation did indeed become objects associated with their producers.

As further proof of this, Carla used a full hand gesture to devise a plan for who could say what to the larger group at the end of the first session, effectively summarizing through these gestures the main points of the first part of their discussion. Although she was physically off camera, we can see Carla’s whole hand gesturing from one participant to the next, referencing through her gesture their earlier contributions to the discussion (see Figure 19):

456        **Carla:**        you could talk about the diversity aspect ((gesturing to Katie)), I could speak to how it  
 457                    appeals to middle-school kids ((gesturing to herself)), **you could talk about your**  
 458                    **personal connection** ((hand gesturing to Shirley))



Figure 19. “you could talk about your personal connection”

The gestures functioned here both as concrete deictics, pointing toward actual people, and as abstract deictics, reconnecting the people to earlier ideas they had contributed to the discussion. It should also be noted that this group did not express the same level of affective engagement in this book or the desire to use it in their classrooms, and Shirley’s “personal connection” (line 458) was actually her disappointment in reading this book as an adult when she had liked it so much better as a sixth grader. Carla’s summary of the main points of the discussion, accompanied by gestures toward their producers, also demonstrates how the participants in this discussion had not developed a thoroughly interdependent, or what might be called *intersubjective*, understanding of the book through talk because their individual contributions to the discussion continued to stand on their own as identifiably independent thoughts.

### Conclusion

While there may be gender-based and individualistic differences in the use of interactive abstract deictic features, the absence or infrequency of these gestures in small-group discussion may also suggest that the various activities it can be seen to support (e.g., connecting ideas among participants, referencing earlier ideas, expanding or elaborating upon them, and realigning with them) may simply not have been happening as much. In Group B, there was far less overlapping talk and longer periods of silence between utterances. While various ideas were raised, they were not latched onto by other participants as often nor discussed as connected to one another, and there was less follow-up from one utterance to the next. Perhaps interactive abstract deictic gestures may be seen to act like a kind of glue that connects the various aspects of the discussion into one intersubjective and interdependent whole, rather than leaving it as a series of unrelated and disconnected ideas. This would seem to have important implications for teachers

working under the assumption that small-group discussion automatically generates a kind of socially constructed understanding or shared knowledge of a given subject.

Gesture-in-interaction does far more than indicate turns at talk (Duncan & Fiske, 1985), also functioning, as Gullberg notes, to “elicit feedback without abandoning the turn, to comment on on-going talk without claiming it [Heath, 1992], or to indicate agreement or cooperation [Fornell, 1992]” (1998, p. 57). This brief analysis of instances of what I have been calling interactive abstract deictic gesturing suggests that such gestures also function to support the shifts in footing that allow participants to actively and efficiently connect, align, extend, reference and corroborate other participants’ ideas throughout the conversation. This places them in the realm of what LeBaron and Streeck (2000) call *gestural signs*, which are developed within *communities of practice* (Lave, 1991), and through which “communal knowledge is incorporated, stored, and organized” (LeBaron & Streeck, as cited in McNeill, 2000, p. 119).

I would suggest that while abstract deictic gestures of the kind analyzed above appear to play a vital role in the successful development, maintenance, and organization of intersubjective or collective knowledge, as the two groups in this study reveal, they are not necessarily engaged in to an equal degree across groups. As Kendon asserts:

What forms [of gesture] are fashioned will depend upon the circumstances of use, the communicative purposes for which they are intended, and how they are to be used in relation to other media of expression that are available. (2004, p. 107)

The different relation to “other media of expression” (*ibid.*) can be observed in Group B’s more avid interaction with additional materials, leafing through their copies of the book, silently taking notes, and counting haiku syllables on their fingers, rather than using their hands to interact with one another’s ideas. Their framing of the activity of small-group discussion seemed to be more individualistic than that of Group A. The seating arrangement may also have influenced this framing since Group A was focused around a shared space (a round table), while participants of Group B were each at individual desks that were not evenly distributed in a circle. Also the level of distraction for the two groups was vastly different, with Group A isolated from the larger group in the lobby and Group B conscious of the interactions of other groups around them, as well as their instructor moving in and out of groups. Furthermore it is possible that Group A worked harder to make connections among their ideas and were more invested in a successful group interaction because their instructor was behind the camera for the duration of the session, whereas with Group B, the pressure of the instructor’s attention was only felt intermittently. It could be argued that Group A was not only engaged in a Literature Circle, but they were also “performing” engagement in a Literature Circle for a specific audience (their instructor) (Goffman, 1959, 1981). Another difference seems to be that while Group A members were already using the book under discussion in their own classroom contexts, Group B expressed ambivalence about the relevance of their book to their own work. The level of affective engagement in the novel and the activity was strikingly different between the two groups and

may have partially accounted for Group B's less active engagement in developing gestural connections across ideas as they were expressed.

Although significantly more research would be needed to make any broad claims, there are several details from this brief study that would suggest larger implications for instruction based on a social-constructivist paradigm. If interactive abstract deictic gesturing can be viewed as a barometer of the level of active development or maintenance of intersubjective knowledge in small-group discussion, then it would certainly be in a teacher's interest to maximize conditions that would allow such interaction to happen as freely as possible. The comparison of Group A and Group B suggests that considerations might include: clearly defining a group activity that requires a high level of cooperation among participants in a limited period of time, ensuring materials that are of immediate relevance and affective interest to members of the group, providing optimal space and seating arrangements around a shared focal point, and limiting as much as possible the interference of outside distractions from other groups. The instructor's (or some other audience's) ongoing presence and attention may also be a factor. If, on the other hand, overt interactive deictic gestures are shown to be a gendered or culturally specific phenomenon, it might also be important to consider how the interactive connectivity of ideas in small-group discussion may be happening through other means (e.g., facial expressions, gaze, or eye contact) before drawing any overarching conclusions. What can be concluded from this data, however, is that interconnections among ideas in small-group discussion and the development of shared knowledge about a given topic are accomplished by far more than speech alone, and that gesture may be an important barometer of the level of interactive engagement and shared knowledge development occurring in these settings. Further studies of gesture-in-interaction, however, are needed to enable us to identify how speech and gesture work together effectively to create intersubjective understanding among group participants and to better understand the factors that might impede or enhance this process within the classroom context.

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## Notes

<sup>1</sup>The name of the course and the professor who designed it shall remain anonymous, as shall the student participants, all of whom appear in this paper under pseudonyms.

<sup>2</sup>Where gesture coincides with speech in the photograph, I have put the speech in bold. Otherwise, gesture is indicated in double parentheses (see Appendix for full description of transcription conventions).

## References

- Babbitt, N. (1975). *Tuck everlasting*. New York: Farrar, Straus, and Giroux.
- Calkins, L. (1986). *The art of teaching writing*. Portsmouth, NH: Heinemann.
- Daniels, H. (1994). *Literature circles: Voice and choice in the student-centered classroom*. New York: Stenhouse Publishers.
- Duncan, S., Cassell, J., & Levy E. (Eds.). (2007). *Gesture and the dynamic dimension of Language: Essays in honor of David McNeill*. Gesture Studies (Volume 1). Amsterdam: John Benjamins Publishing Company.
- Duncan, S., & Fiske, D.W. (1985) *Interaction structure and strategy*. Cambridge: Cambridge University Press.
- Fornell, C. (1992). A national customer service barometer: The Swedish experience. *Journal of Marketing*, 56, 6-21.
- Goffman, E. (1959). *The presentation of self in everyday life*. New York: Anchor Books.
- Goffman, E. (1964). The neglected situation. *American Anthropologist*, 66, (6), 133-136.
- Goffman, E. (1974). *Frame analysis*. Cambridge, MA: Harvard University Press.
- Goffman, E. (1981). *Forms of talk*. Philadelphia, PA: University of Pennsylvania Press.
- Gullberg, M. (1998). *Gesture as a communication strategy in second language discourse: A study of learners of French and Swedish*. Sweden: Lund University Press.
- Harste, J., Short, K., & Burke, C. (1988). *Creating classrooms for authors: The reading-writing connection*. Portsmouth, NH: Heinemann.
- Harwayne, S. (1992). *Lasting impressions: Weaving literature into the writing workshop*. Portsmouth, NH: Heinemann.
- Kendon, A. (1992). The negotiation of context in face-to-face interaction. In A. Duranti & C. Goodwin (Eds.), *Rethinking context: Language as an interactive phenomenon*, (pp. 323-334). Cambridge: Cambridge University Press.
- Kendon, A. (2004). *Gesture: Visible action as utterance*. London: Cambridge University Press.
- Konigsburg, E. L. (1996). *The view from Saturday*. New York: Aladdin Paperbacks.
- Lave, J. (1991). Situated learning in communities of practice. In L. Resnick & S. Teasley, *Perspectives on socially shared cognition*, (pp. 63-82). Cambridge University Press.
- LeBaron, C., & Streeck, J. (2000). Gestures, knowledge, and the world. In D. McNeill, *Language and gesture*, (pp. 118-138). London: Cambridge University Press.
- McNeill, D. (1992). *Hand and mind: What gestures reveal about thought*. Chicago: The University of Chicago Press.
- McNeill, D. (2000). *Language and gesture*. London: Cambridge University Press.
- McNeil, D. & Duncan, S. (2000). Growth points in thinking-for-speaking. In D. McNeil (Ed.) *Language and gesture*, (pp. 141-161). Cambridge University Press.
- Ochs, E., Gonzalez, P., & Jacoby, S. (1996). "When I come down I'm in the domain state": Grammar and graphic representation in the interpretive activity of physicists. In E. Ochs, E. A. Schegloff, & S. A. Thompson (Eds.), *Interaction and grammar*, (pp. 328-370). Cambridge: Cambridge University Press.
- Peterson, R. & Eeds, M. (1990). *Grand conversations: Literature groups in action*. Ontario: Scholastic.
- Routman, R. (1991). *Invitations: Changing as teachers and learners K-12*. Portsmouth, NH: Heinemann.

- Tannen, D. (2007). *Talking voices: Repetition, dialogue, and imagery in conversational discourse*. Cambridge: Cambridge University Press.
- Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Wertsch, J. V. (1991). *Voices of the mind: A sociocultural approach to mediated action*. Cambridge: Harvard University Press.

Appendix

**Transcription conventions and symbols used are:**

- (.) indicates silences with numbers indicating the length of the silence in terms of seconds or tenths of seconds
- [ ] brackets are used to indicate overlapping speech
- a dash indicates a sudden or abrupt cut-off of speech
- :: colons indicate a lengthening of the vowel sound
- (( )) double parentheses are used to explicate gestures, laughter, and other nonlinguistic information
- Bold** indicates where gesture and speech coincide in illustration
- = shows an ongoing turn at speech
- xxx indicates incoherence
- ? indicates a rise in intonation
- abc underline indicates an increase in volume