GESTURE IN MULTIPARTY INTERACTION:
A STUDY OF EMBODIED DISCOURSE IN SPOKEN ENGLISH AND AMERICAN SIGN LANGUAGE

A Dissertation
submitted to the Faculty of the
Graduate School of Arts and Sciences
of Georgetown University
in partial fulfillment of the requirements for the degree of
Doctor of Philosophy
in Linguistics

By

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Washington, DC
July 31, 2013
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ABSTRACT

This dissertation is an examination of gesture in two game nights: one in spoken English between four hearing friends and another in American Sign Language between four Deaf friends. Analyses of gesture have shown there exists a complex integration of manual gestures with speech. Analyses of sign language have implicated the body as a medium capable of rendering symbolically complex structures that wax and wane linguistic. By incorporating a Peircean semiotic analysis of symbols (including spoken and sign language) in the tradition of interactional sociolinguistics, I analyze both spoken and sign discourses as situated engagements that effect and are affected by the embodied, composite utterances (Enfield 2009) contained within them.

To address simplified conceptualizations of gesture as a continuum of forms, I compare embodied utterances in an array of interactive environments, showing the flexibility and constraints of the gestural modality. When participants played the game, gesture took on full burden of communication and both hearing and deaf players continued to use their bodies in similar ways to structure the utterances as part of a discourse (cf. Bavelas 1994). When participants shifted tasks to setting up the game, they incorporated items from the physical surround into their composite utterances. As participants engaged across speech events they managed turns, marked stance, and conveyed propositions integrating manual and nonmanual
forms to accomplish coherent discourses (Schiffrin 1987). I highlight *gestural mimicry* and *gestural mirroring* as instances of embodied repetition and two manual forms called the Open Hand Palm Up and Gun Handshape Palm Up as examples of corporal discourse markers.

These findings complicate theoretical treatments of gesture as points on a continuum. By reframing the discussion of gesture’s relationship to language as fundamentally an issue of how people engage through their bodies, I argue a unified theory of gesture can incorporate both spoken and sign languages.
ACKNOWLEDGEMENTS

This work could not have been realized without a community of people around me. First and foremost, I wish to thank Heidi Hamilton whose unwavering encouragement and level-headedness got me through this. Her classes in discourse analysis first introduced me to the joys and perils of analyzing multiparty interaction. I appreciate so much the passion she brings to her work and the attention she pays to teaching her students. To Paul Dudis whose work on depiction helped ground my understanding of contemporary works on ASL, especially works on depiction and cognitive linguistics. His insight has been and continues to be influential on my view of language. To Mark Sicoli who bravely introduced me to semiotics. His enthusiasm for the link between multimodal interaction in speech and sign was encouraging when I needed it the most. To Dan Loehr who first introduced me to the field of gesture studies during his class “Gesture and Language” at Georgetown. To Anna Trester for her practical guidance and encouragement, she helped me jump over the cliff to start and keep writing. To Yves Delaporte, my colleague and friend, our chance meeting on a park bench in Paris thirteen years ago is ultimately responsible for me pursuing this degree. Finally, to all of the participants in my study who graciously and enthusiastically welcomed me into their spaces and allowed me to essentially analyze their every move. I thank you all.

I would be remiss if I did not acknowledge my earliest connections to the Deaf community (especially my neighbors and childhood friends, Chrissy and Nick) and all of the Deaf people from whom I learned to sign in Ohio and in Paris. I also wish to thank my interpreting mentors, Liz Bartlow-Breslin, Paula Blumberg, and Joyce Cole, as well as all of the
interpreters who “brought me up” as a newbie in Chicago. Countless hours were spent analyzing both English and ASL in actual interactions which ultimately contributed to the analyses I conduct here.

This dissertation could not have been completed without the support, love (and several kicks in the pants) of many family members and friends. First, my parents, Jim and Martha, who gave me a great childhood, a strong work ethic, and (most importantly for this study) access to ASL classes. To my Georgetown friends Abbe, Colleen, Jen and their spouses Lauren, Becky, and Ben who helped me decompress and stay grounded in reality. To Mindy Frankel, who has supported me both as an interpreting colleague and a close friend. By allowing me to commandeer her home while she was on vacation, I was able to complete a first draft. To my three spunky children Hanna, Yohannes, and Eden whose strength, resilience, and boundless joy remind me to stay present and try harder. You are each a gift to this world and I hope I do you justice as your mama. Finally, to my partner, Edna, we have shared a steadfast obsession with the history of ASL and now share the trials and tribulations of daily life. From taking out the trash, to watching the kids, to dealing with me at my worst--this dissertation could not have been done without your unwavering support and faith that we could do this. Thank you.
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CHAPTER ONE

INTRODUCTION

1.1 Introduction of the problem

The study of gesture is a study in contrasts where seemingly disparate symbolic phenomena mix and mingle, furnishing visual representations of meaning that range from the highly iconic to the highly abstract. People have misconceptions about gesture. There is no simpler way to put it. It is nebulous, it is difficult to define, and it is everywhere. Gesture has been a subject of scrutiny for centuries (e.g., De Jorio, 2000 [1832]; Kendon, 2004 for a review). It has been characterized as transient and fixed, iconic and arbitrary, language and not language. Nowhere are these contrasts more germane than to the study of sign languages where analysts have no choice but to account for how the body (through gesture) becomes a conspicuously communicative medium capable of producing language.

Gesture’s relationship to sign language is half of the issue. The other side of the linguistic coin is its function in relation to spoken language. Here, too, scholars have struggled to make sense of how the body contributes meaning to language without being language. It seems intuitively obvious that sign languages are related to gesture and yet different than the gestures hearing people use when they speak (Armstrong & Wilcox, 2007). Wresting through this intuition, accounting for gesture’s form and function in sign and speech, has proved to be much more complicated.

As a hearing person whose entree into the deaf community came through both personal (though not familial) connections and (importantly) ASL classes, I have observed the
ideological contrast where what it means to be “deaf” is described (at least partially) in contrast to cultural conceptions of what it means to be “hearing” (cf. Ladd’s (2003) DEAF-COMMUNITY HEARING-WORLD contrast, p.41). Hearing novitiates are colloquially positioned as body language amateurs, perhaps in part because the gestures that co-occur with speech do not make sense without sound and because not all hearing people are quick to learn sign with native-like fluency. Kemp (1998), describing his experience teaching hearing students ASL, said, “I find it a sometimes tedious task when I try to teach the use of nonmanual signals in my ASL classes. For example, if I mention that they show blank faces while signing, my students will make either exaggerated or nonsynchronized facial movements when signing specific sentence types such as questions, assertions, negations, topic-comment, and so on” (218). In my own experience working with interpreting students, constructed action, depiction, and referential use of space prove especially challenging to teach. Of course, gesture researchers have shown that hearing people systematically use their bodies to communicate incessantly; they gesture from an early age, they acquire more complicated gestures and gesture phrases as they develop language, they gesture even when no one is looking at them (e.g. on the phone) and they attune their gestures to their addressees depending on context. Stated differently, hearing people cannot communicate without gesturing, they are expert gesturers, masters of their craft.

The notion that hearing people are incompetent gesturers more likely comes from the operative use of the word gesture which is “gesture as performance” or mime. This particular use of the body, where subjects are constrained from using speech, has the potential to be more like (sign) language (e.g., Goldin-Meadow, McNeill & Singleton, 1996). When the performative
use of gesture is set next to sign language the two resemble each other however the “hearing version” looks sloppier. These language-like utterances are newly born; they have not stood the test of time, endured the shifting of positions and filing off of excess movements that refine signs and signed utterances over generations. These forms resemble sign but they are not sign.

The perceptible difference between hearing gesture and sign language has influenced how scholars of ASL have responded to visual imagery and indirectly impacted co-speech gesture scholars’ accounts of where sign language fits in their analytical frameworks. There are two competing views of gesture: one that affiliates it with sign and one that expels it from sign. This messy contrast is reflected in contemporary attempts to (re)situate gesture in sign language.

Researchers of gesture in spoken and sign language have made inroads, especially in the last forty years, accounting for the means by which the body creates and expresses meaning. We now know that gesture is part of a communication system (Kendon, 2004), that it co-occurs with speech (McNeill, 1992, 2005), that it has the potential to become more like language when it takes on the full burden of communication (Goldin-Meadow, et al 1996), and that it plays at least a limited role in sign languages (Liddell, 1995, 1996, 2000, 2003). We still cannot fully explain how the gestures hearing and deaf people use are related. In this dissertation, I address what I see to be three key theoretical barriers preventing us from fully accounting for gesture’s interface with both spoken and sign language. I show how these barriers have led analysts to overlook and/or underestimate gesture’s contribution to discourse coherence and interaction. While much of the progress we have made in characterizing gesture as it operates in speech has been fruitful, we have reached an impasse where the murkiness of gesture’s relationship to language, regardless of modality, must be addressed.
The first theoretical barrier derives from discernible differences between sign language and what is commonly referred to as *co-speech gesture* (McNeill’s *gesticulation*). Researchers examining co-speech gesture emphasize its close integration with spoken utterances as one system where both modalities work in tandem to convey different aspects of thought: speech represents the static dimension while gesture represents the dynamic dimension (McNeill, 2005:18). The binary characterization of speech and gesture as two distinct (yet related) modes discounts the level of gradience that spoken language exhibits (nonce words and phonation, for example) and also the level of systematicity exhibited by gesture (the use of eyebrow raises with Yes/No questions and referential deixis, for example). Scholars interested in multimodal interaction (e.g., Enfield, 2009; Goodwin, 2011; Streeck, 2011) have pointed out the inconsistency in such absolute categories. However, a unified account that includes sign language has yet to be reached. While the boundaries between speech and gesture are easy to draw in theory, they are difficult to uphold in situated discourse and even more challenging in *sign* discourse.

In this study, I examine data where hearing people use gesture without speech and where deaf people use it without sign in the context of the gesture-centric game *Guesstures*. Participants were asked to play the game, not in a controlled, laboratory environment, but as part of a game night among four friends. By situating this particular use of gesture in two actual interactions, I was able to analyze how participants transferred communicative burden between articulators as they navigated between and through speech events. Touching on a variety of speech events that transpired during interactions, I show that both deaf and hearing participants

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1 Which I will use as a synonym for gesture that McNeill (1992) characterizes as occupying the leftmost extreme of the gesture continuum.
similarly construct embodied, composite utterances (Enfield, 2009) using all articulators
uniquely suited to their respective addressees and interactive goals. Ultimately, I argue, the
assumption that gesticulation is a unique property of spoken language impacts the way we view
and define gesture in both modalities.

The second theoretical barrier comes from the perspective that hearing and deaf people
must necessarily gesture in different ways because of modality. As I already mentioned, it seems
intuitively obvious that co-speech gesture and sign language are not the same. Researchers
characterize this difference (e.g., Emmorey, 1999; Liddell & Metzger, 1998; Schembri, Jones, &
Burnam, 2005) largely by relying on a definition of gesture as a range of forms on a continuum
(McNeill, 1992) or set of continua (McNeill, 2005) where sign language is positioned as the
exemplar of linguistic systematization of gesture. At first glance, this schema appears entirely
apropos. Studies have shown that when gesture is produced without speech the linguistic
potential of communication through the body becomes enhanced (Goldin-Meadow, et al 1996;
Singleton, Goldin-Meadow & McNeill, 1995). That is, hearing gesturers begin to structure
gestures like deaf people use signs.

The consequence of viewing gesture and language through this lens is that only a small
set of discourse features (mainly depicting constructions, constructed action, and referential use
of space, Liddell, 2003) are eligible instantiations of gesture in sign. The other ways deaf people
structure their discourses through their bodies (to regulate turns or deictically refer with eye
gaze, for instance) or signal pragmatic moves (like marking stances) are not considered to fall
under the gesture domain although these same behaviors in spoken discourse are attributed to
gesture. So, while typologies of gesture have been used as a starting point for reassessing a
certain class of signs, in general, they are viewed (and rightly so) as insufficient for fully explaining gesture as it is used in sign language (e.g., Cormier, Quinto-Pozos, Sevcikova, & Schembri, 2012).

Gesture can assume different forms, which is the motivation behind schematizing it on a continuum, but I argue here that conceiving of gesture in this way prevents us from characterizing the much broader system of embodied discourse. We need to account for gesture’s relationship to language but to successfully make the claim that the two are related we necessarily have to shift how we view and define both gesture and language. Language is not purely static or digital and gesture is not purely dynamic or analog. Recent works on multimodal interaction (e.g., Goodwin, 2007, 2011; Enfield, 2009, 2011; Kockelman, 2005) capture this notion by furthering Charles S. Peirce’s (1955) theory of semiotics in the analysis of language in interaction. These scholars argue that examining gesture and language in binary terms precludes us from understanding the rich and expansive instantiations gesture takes throughout the course of an interaction. In this study, I show that by assessing gesture like we assess situated interaction, specifically incorporating a model of discourse that accounts for the layers of interactional work people conduct in face-to-face interaction (Schiffrin, 1987), we can account for the array of forms and functions that gesture presents in both modalities.

The final theoretical barrier we face in fully accounting for gesture in both spoken and sign languages is that abstract forms typically associated with gesticulation (whose meanings are not transparent) are either not used by deaf people or have been incorporated into their linguistic code. For example, Schembri, et al (2005) turn to co-speech gesture theory (McNeill, 1992) as a starting point for analyzing sign language constructions, however the forms these
authors target as gestural are depicting constructions, the most highly iconic and imagistic forms in sign language. They say,

"The term gesture in this article refers to the broad range of iconic or mimetic gestures that may be created anew, can cooccur with speech (as gesticulation) or alone, and that can "depict concrete aspects of imagery with forms that look like the images they represent" (Okrent, 2002, p.182). It is these forms that share some properties with classifier verbs of motion in signed languages and that provide the impetus for the present study" (273).

The value of co-speech gesture theory to the analysis of sign language is unequivocal, however, there has yet to be an assessment of more abstract forms (gestures that do not depict imagery) as akin to co-speech gestures. This has consequences for the way we analyze spoken discourse as well. The embodied gestures hearing people use are more easily relegated paralinguistic status because they emerge in a distinct modality from speech (Kendon, 2008; Sicoli, 2007).

Ultimately, I further the examination of embodied discourses by juxtaposing traditional definitions of gesture with situated instances of gesture in spoken and sign interactions. Depiction is the first conceptual step towards linking the existence of transient forms (gesture) with established ones (signs/words). The next step is assessing the range of strategies that span modalities (accounting for the more entrenched, conventionalized gestures and the more transient, unconventional instantiations of sign/speech) that both groups use to structure discourse.

Before I go into more detail about the approach I take in this study, I turn next to explain how I came to understand the “gesture problem” in this way. My view of gesture, its relationship to language, and its behavior in communication is rooted in my professional role as an interpreter and in intersecting research interests in the history of ASL (specifically its relationship to French Sign Language or LSF), discourse analysis, and language in interaction.
1.2 My engagement with the topic

I have been interpreting professionally between spoken English and ASL for over a decade. Though this dissertation does not concern interactions mediated through interpreters, my experience working as one consistently influences how I perceive gesture in spoken and sign discourse. An interpreter’s task is to seek equivalent meaning between two languages, to become habituated to thinking about them as they stand side-by-side. Contrary to common notions of situated interaction, I frequently find myself dropped into environments about which I know nothing, mediating communication between people who generally know each other quite well yet whom I have just met. This requires a great deal of inference to assemble missing information most people mutually share but never explicitly state. Nonverbal manifestations of meaning (how people orient to each other, how big they sign/gesture, what facial expressions and tone of voice convey) are particularly useful in deciphering the shared knowledge between participants. Interlocutors ordinarily process these cues subconsciously but as an interpreter, I need to consciously attune to them to understand the relationships between participants and understand what their talk means. These multimodal signals are contextualization cues (Gumperz, 1982, 1992, 1999) that provide participants with structured expectations (Tannen 1993) and make an interaction run smoothly. To do my job well, to accurately convey equivalent messages in both languages, I must perceive and incorporate as many of these signals as I can, though the interactants do not consciously notice them at all.

After learning ASL and later French Sign Language (LSF), and then interpreting between English and ASL, I began to realize the degree to which hearing and deaf people communicate
both explicit and implicit messages through their bodies. Though we don’t typically conceive of hearing people needing to see each other to communicate, as Goffman (1979) aptly notes, hearing interlocutors are best characterized as “bod[ies] engaged in acoustic activity” (17). As I began to pay more attention to manual gestures, torso shifts, movements of the face, and eyebrows that hearing people used, I noticed the degree of overlap between discourse-level structures in both sign and speech, so much so that it is difficult to interpret what a hearing person says without also seeing them.²

I will give an example. During one meeting I interpreted, the hearing and deaf participants sat side by side, both facing me (an atypical arrangement but they were both looking at a projected screen behind me). They had been discussing plans for an upcoming project for about an hour. Nearing the end of the meeting, the hearing person said something to the effect of “I guess that’s what we’ll have to do” at which point he gestured a form I call the Gun Handshape Palm Up flip—a gesture typically used to cite and evaluate previous discourse (see Chapter 6). The deaf person was looking at me—she did not see what the hearing person gestured—and immediately produced the same Gun Handshape Palm Up form while shrugging her shoulder and tilting her head to the side. Both participants were oriented to the interaction, they both evaluatively marked the end of their discourse with their bodies in the same way.³ But because gesture in sign is treated as distinct from gesture in speech (e.g., McNeill, 1992, 2005; Emmorey 1999), this type of abstract gesture should not--cannot--operate in the same way.

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² Typically interpreters sit next to or in front of a hearing person thus precluding us from having the hearing person within full sight.

³ Gulberg (2011) found a similar pattern in the gestures used by L1 and L2 speakers of the same spoken language.
From the onset of the field of ASL linguistics until the late 1990s, *gesture* was taboo in scholarly analysis of ASL (e.g., Frishberg, 1975; Klima & Bellugi, 1979; Woodward & Erting 1975). I learned ASL in the early 1990s and was taught never to equate sign with gesture; sign was sophisticated, rule-governed, and official while gesture was unrefined, “loose” (Klima & Bellugi, 1979:30), and informal. Like most, I conceived of the relationship as binary: a form was either a linguistic sign or a non-linguistic gesture. My view shifted significantly when in Paris for the first time in 2000, learning LSF and researching ASL’s historical connection to it. I very quickly learned that LSF inherited several of its signs from gestures hearing people used, signs which ASL then inherited from LSF. Most of these forms were originally emblems (like the horn handshape which was used to ward off the Evil Eye when directed at people (Shaw & Delaporte, 2010)).

This type of gestural borrowing shouldn’t be surprising; emblematic gestural forms are known to function like signs (McNeill, 1992). Even knowing this, I still conceived of gesture’s relationship to sign language as primarily *historical*. I then experienced a specific instance of a sign that led to a profound alteration in the way I view gesture’s relationship to sign language and is at least partly responsible for my interest in studying gesture at all.

I attended an awards ceremony for researchers in the French deaf community where a deaf gentleman performed a narrative (the details of which I no longer recall) about an old man. At some point, the storyteller used the sign VIEUX (“old”), which is produced by tapping the thumb and index side of a fist underneath the chin. I already knew the sign was the etymon for

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4 Refer to Appendix 2 for the typology of handshapes I use in this dissertation (which is intentionally different than standard typologies).
the ASL sign OLD. On stage, the storyteller leaned over to depict an old man and held both of his fists stacked on top of each other underneath his chin (Figure 1.1).

![Figure 1.1: VIEUX “old”, French Sign Language](image)

Lambert (1865)

I had recently learned that the etymology of this sign was not a symbolic representation of a beard (as is popularly believed in the U.S.) but in fact derived from a French custom where older people sit and rest their chins on canes (symbolically represented by the fists grasping them: “as if holding a staff with both hands underneath the chin” (Lambert, 1865)\(^5\)). Seeing the performance, where the deaf man was clearly aware of the custom (if not the sign’s etymology), I was struck by the fact that somehow the gestural history of the sign had been retained such that the storyteller was able to pull from it as part of his repertoire while producing a narrative centuries after the sign’s birth.

This was no paltry realization. Coming from an American tradition of sign language research, I was keenly aware of works like Nancy Frishberg (1975) who convincingly argued that the historical evolution of signs from iconic gestural forms to abstract linguistic signs occurred once. Put differently, after sign languages evolved (read: became linguistic systems) they no longer relied on or used the iconicity characteristic of gesture (read: primitive communication). But if this argument were true--if deaf people used gesture at one moment in

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\(^5\) Original quote: “tenir comme un bâton avec les deux mains sous le menton” (Tr. E. Shaw)
their language’s evolution--how could we explain that signers *still* shifted back to it centuries after the signs became linguistic?

Jürgen Streeck (2002) analyzes the use of *like* (in English) and *so* (in German) as quotatives, increasingly used to introduce *body quotations* (gestural performances like constructed action) in spoken discourse. He notes that *like* originally meant *body* and although English speakers have no knowledge of this, "the languages 'remember' this connection; they can keep it in play and available for renewed use" (587, Emphasis original). In this study I examine the ways in which gesture is kept in play as a resource for renewed use in both spoken English and ASL. Hearing and deaf interactants use their bodies in meaningful ways that are also strikingly similar to each other when we examine them in tandem. Gesture, like the pre-linguistic index point we first use as infants (Enfield, 2009:91), is never fully cast off from either language but is fully integrated and manipulated by interlocutors based on situational constraints. The tension between exonerating sign language from its gestural albatross and redeeming gesture’s status as part of sign language moved me to return to the story of how gesture is used by hearing people and whether the lens through which we examine gesture in sign has been obscured by a tradition that views it as a binary phenomenon. I present this analysis as a new way of seeing gesture that will hopefully contribute to a better account of its purpose in human communication.

1.3 Approach

Deaf people continue to use gestural forms even in highly evolved/developed sign languages. But the connection (or division) between *gesture* (and its related step-children *gestural, gesture-*
like, iconicity) and sign is murky. We now know Frishberg’s theory, that signs not only lose but abandon iconicity over time, only partially explains how ASL operates (cf. Taub, 2001). Frishberg was correct in that deaf people become more efficient as they make repeated use of signs and this efficiency is manifest through a loss of iconicity. What Frishberg’s claim does not explain is how iconicity remains a productive and ubiquitous feature of sign discourse. Deaf people are fully capable of conveying highly abstract forms as part of their discourse and they are equally able to convey highly iconic depictions (like when performing a narrative or playing a game) and a range in between as they see fit. What has been typically conceived of as a one-way movement, like an evolution on a continuum, is in fact a two-way movement, both away from and toward iconicity, based on the demands discourse imposes on signers.

Several decades of comparing spoken and sign languages have produced enough empirical data to prove sign languages are just as systematized as spoken languages (Klima & Bellugi, 1979; Frishberg, 1975; Liddell & Johnson, 1989); they are true, linguistic systems through and through. However, when sign language scholars imported spoken language theories (that were based on transcribed spoken discourse that excluded gesture) into their preliminary assessments of ASL, they also imported the assumption that gesture (and its associated feature iconicity) was not a part of language (Kendon, 2008). Now that co-speech gesture theory is gaining favor among some scholars’ treatments of visual imagery in sign (Cormier, et al 2012; Schembri, et al, 2005; Liddell, 2003 for instance), there remains an entrenched ideology that positions gesture as paralinguistic (Birdwhistell, 1968) even though a great deal of embodied utterances display systematicity. The preliminary comparisons between co-speech gesture and sign language constructions I mentioned above have illuminated some important inconsistencies
and gaps that can only be addressed, as I see it, by returning to the definition of gesture and where we place it in language. The key to comparing the two is analyzing spoken language as it is always produced, which is with gesture. Additionally, by incorporating a semiotic analysis of language with a cognitive linguistic understanding of language as embodied, we can begin to explain how these resources work together to create meaning in each modality.

Analyses of gesture’s role in communication have shown it to be more integral to understanding language than has previously been argued. What we have not yet seen are studies that examine gesture in sign when it is highly abstract or, in semiotic terms, as symbols (Peirce, 1955). I return here to the three barriers preventing us from accounting for gesture’s place in language. To review: 1. Once the gestural modality takes on full communicative burden, gesture (or gesticulation) is cast off, 2. Gesture in spoken language, which is clearly delineated by two distinct modalities, is fundamentally different than gesture in sign language, and 3. Gesture in sign language is primarily constrained to those depictive, iconic, mimetic forms and when gesture is abstract, it is distinctly “hearing”. In this dissertation I attempt to unpack these ideas and examine gesture, not just for its iconic, imagistic qualities, but also as an interactive resource in spoken and sign discourse. I attempt to clearly demonstrate the shift from gesture to sign, traditionally believed to have occurred in sign language once, in fact occurs multiple times in myriad ways based on interactional demands (not evolutionary tendencies).

In order to argue this point, I reexamine previous accounts that pinpoint iconicity as the root of the problem and propose we incorporate a view of language that starts with utterance-level phenomena situated in interaction (cf. Enfield, 2009; Goodwin, 2011; Streeck, 2011). My goal is to present a unified analysis of embodied discourse that incorporates both modalities and
ultimately more clearly captures gesture’s connection to language as a whole. I aim to show that both sides of this linguistic amalgam stand to benefit from examination of the other. By (re)integrating gesture in the sphere of language, I hope to convincingly show the importance, if not the mandate, of examining speech and gesture as two expressions of language.

Admittedly, I approach my analysis biased to favor the incorporation of meaningful body behaviors as part of language (cf., Sicoli, 2007). I examine these modalities side-by-side to show that gesture is best understood when we view it as a situated communicative resource. I discuss how analyses of sign and speech have both been limited by their modalities in different ways that have ultimately impacted respective representations of how gesture operates within them: sign suffers from the difficulty in parsing the two, speech suffers from the ease in doing so. In that vein, I further arguments others have made (e.g., Kendon, 2008; Sicoli, 2007; Armstrong & Wilcox, 2007) that language can include a range of forms from the static to the dynamic and that the body is a locus for meaningful units (e.g., Yerian, 2000; Goodwin, 2007) not subordinate to but fully integrated with the speech/sign stream. In the end, I reach the conclusion (like Armstrong & Wilcox, 2007) that spoken language is best described as a verbal-visual-gestural language just as sign language is described as a visual-gestural language.

1.4 Aspects of gesture in the context of playing a game

Gesture’s place in the study of spoken language is a tenuous one; the different modalities present obstacles for those linguists who have long been married to the spoken form. In signed contexts, the reverse is true: the modality that carries the primary burden for communication is the same channel through which gesture is executed. In a very real sense, defining what gesture
is for the purposes of linguistic analysis has led to the practice of segmenting gestural forms into artificial categories to which situated language-use does not necessarily conform. Streeck (2011) calls social interaction “a vociferous process, always hungry for stuff out of which signs, symbols, and scenic arrangements can be made” (67). This study brings to the fore the integrated moves participants produce through their bodies and challenges assumptions that position spoken and sign language in diametric opposition. I depart from focusing on one type as a sort of exemplar of gesture in sign, and instead adopt Enfield’s (2009) call for starting with the composite utterance as the unit of analysis:

“[T]o understand the process of interpreting any type of composite utterance, we do not begin with components like noun, rising intonation, or pointing gesture. We begin instead with the notion of a whole utterance, a complete unit of social action which always has multiple components, which is always embedded in a sequential context (simultaneously an effect of something prior and a cause of something next), and whose interpretation always draws on both conventional and non-conventional signs, joined indexically as wholes” (223).

Composite utterances, situated in interaction, are the starting point in this analysis. Gesture is “too coarse” a term (Enfield, 2011:62) to describe the variety of ways people in the “vociferous process” of social interaction create meaning. I use gesture here to refer to any meaningful use of the body, including all visible articulators--eyes, eyebrows, torso, legs, and even the legs and feet.6 Interactants shift between these articulators depending on both local and global interactional demands (cf. Goodwin, 2000, 2007). Much as spoken words weave in and out of a discourse, sometimes dropping off, sometimes continuing for strings at a time, gesture, too, is woven into the same fabric. I argue that gesticulation is not an exclusive property of spoken language nor are depicting constructions exclusive of sign language. Rather, when

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6 And though I do not focus on prosodic features, these should be considered, too.
analyzed from a Peircean semiotic perspective, gesture, speech, and sign can be accounted for as products of interaction, each representing an array of meaning-making tools that both hearing and deaf people manipulate to construct discourses and signal connections to their environments and each other. In sum, rather than looking for **gesture** and then describing what it is and does, I approach these data by identifying moves of the articulators for what they contribute and what they accomplish as a layer (or layers) of interactional meaning.

The benefit of comparing ASL to English is that sign language pushes us to reconsider the linguistic status we ascribe to meaningful, nonverbal behaviors that emerge when hearing people engage in face-to-face interaction. Stated differently, when we examine the moves hearing people make with their bodies during communication in contrast to sign language, it is hard to deny that gestures are also a part of their language. The comparison of ASL and English here is not simply an exercise in finding gesture cognates in each modality. Rather, bringing the two together illuminates similarities between certain phenomena (like deictic use of eye gaze and interactive gestures) that are easily overlooked when we only examine one language. Levinson (2006) calls for a similar exercise in search of universal underpinnings in a human interaction *interaction engine*. He says the search for universals is not to produce “cross-cultural uniformity but, rather, that it provides the building blocks for cultural diversity in social interaction” (62). To make this claim, we must reframe our view of gesture (and symbolic phenomena in general) to include the means by which participants make sense of gesture, how a physical move can become a **sign** (in the Peircean sense) and how that **sign** can transform semiotic dimensions within a single speech event.
Just as language is contextualized (Schiffrin, 1987: 4), gesture is sensitive to different types of interactions (cf. Goodwin, 2011). Task-oriented exchanges, like game-playing or building a house, trigger different instantiations of gesture than interactions at a funeral or a high school reunion. What remains consistent across speech events is that people construct utterances through their bodies. In this study, the speech event is a game night. Game nights are a typical social gathering in the U.S. There is a large market for games oriented to adult players that typically involve plays with language in some form (as opposed to the archetypical child-oriented board game) such as Scrabble, Trivial Pursuit, Outburst, Gibberish, Charades, and the like. Game nights are known to include food and drink, to be casual in nature, and to facilitate connections between participants while introducing the element of competition. The competition is usually viewed as less important than having fun, however, we can learn a great deal about interaction by examining how people orient to each other and to the game.

I chose to use Guesstures for this study for a few reasons, the most obvious being that it required participants to communicate with their bodies without speech, thus creating a controlled data set for comparison between hearing and deaf groups. The timed element of the game also introduced the pressure to expeditiously produce several forms (as opposed to performing one clue as is the case in Charades). Finally, it allowed me to examine how the deaf participants organically determined a boundary (or boundaries) between gesture and sign.

Theoretically, both language groups had access to similar conceptual resources to execute these clues. In other words, the clues were (generally) culturally salient for hearing and deaf participants. The gestural choices each group made in performing these clues, however, were informed by the ways they ordinarily use their bodies to communicate. Acknowledging the
overlap between the two supposedly distinct systems is unavoidable here. Deaf people more consciously make intentional use of their bodies when interacting, whereas hearing people typically have little awareness that they are using their bodies in meaningful ways. This revealed the most striking contrast between the groups when presented with a task that foregrounded the performance of gesture without the aid of the respective linguistic codes. For the deaf people, the task was not at all far from what they do every day. For the hearing people, though, the shift from the subconscious to conscious use of the body was a leap. I detail the methods of data collection in the following chapter. I turn now to summarize the trajectory I take in this study to address these claims.

1.5 Summary of the chapters

By analyzing gesture as it emerges locally (turn-by-turn) and globally (as part of a speech event), I demonstrate how participants intermingle the depictive, mimetic gestures with the less iconic, discourse and/or interaction-oriented gestures. Drawing from notions like Enfield’s (2009) composite utterance and Kendon’s (2004) “visible action as utterance”, I highlight structural and systematic instantiations of embodied utterances which are typically overlooked in analyses that consider gesture when it is primarily depictive.

In Chapter 2, I address the three main theoretical barriers we face when analyzing gesture in interaction and gesture’s relationship to sign, speech, and language in interaction more broadly. I focus on the earliest distinctions made by scholars of ASL from the 1960’s-1990’s that explicitly distanced sign language from visual imagery. I then introduce scholars who have returned to visual imagery as a ubiquitous feature of sign language. While these authors have
addressed earlier biases and moved toward gesture theory as a source of rich empirical contrast, they continue to struggle reconciling the similarities and differences between the two modalities. I then introduce works on co-speech gesture, specifically highlighting the implications of bifurcating gesture from spoken language. I integrate the works on gesture in interaction with works on spoken discourse from an interactional sociolinguistic orientation as a means of analyzing gesture in my data. I conclude the chapter with a discussion of Peirce’s theory of semiotics and the works of a group of scholars specifically applying Peirce’s notion of a sign as a three-part relation to the study of multimodal interaction. This theory presents a useful foundation for reframing gesture as an instantiation of symbolic behavior commingled with a wide array of other symbolic media. In Chapter 3, I illustrate the approach I elected to use to collect and analyze my data. Here, I present more details concerning participant selection, data transcription, and the quantitative and qualitative analyses I conducted.

The analysis of these data is organized in three chapters: first, focusing on gesture during game play, then during situated, joint activities outside the game, and ending with two phenomena--gestural mimicry/mirroring and the Open Hand Palm Up gesture--that emerged throughout speech events. Though the structure might look as if I am following a continuum (from highly iconic to highly abstract forms), I demonstrate that even in situations where we expect to find specific types of gesture, we see consistent patterning that suggests participants endlessly create and innovate new forms while also reusing and returning to conventionalized forms. In Chapter 4, I examine gesture as it emerges during turns-at-play when it takes on the “full burden of communication”. Deaf gesturers incorporate features from signs (like conventionalized handshapes and movements) but move the forms closer to an iconic
representation (or depiction) of the clue. Signers frequently do this in ASL discourse when using constructed action (like in the example of the performed version of the sign VIEUX from earlier in this chapter). The hearing players also use depictive forms and surprisingly commingle them with interactive gestures that structure their performed discourses like the deaf players. I also draw attention to the ways that deaf and hearing interactants use their bodies to communicate aspects of the interaction that are not depictive. These gestures signal orientation to discourse and interaction-level structures. I discuss quantitative differences between the deaf and hearing groups as concerns speed and accuracy of guessing. I situate these differences in broader interactional scenarios, first looking at interactive strategies both groups employ. These data reveal overarching patterns across modalities suggesting composite utterances exist regardless of modality. I conclude the chapter with an analysis of a portion of the spoken group’s interaction wherein one speaker constructs her talk using identical strategies employed during game play.

In Chapter 5, I shift to examine slices of discourse that emerge during task-oriented exchanges where participants work together to achieve some end. Here, I highlight the ways in which participants craft composite utterances to manage turns, decipher rules, and create stances in addition to conveying propositional content. These data further my argument for employing a more rigorous analysis of gesture as situated in actual interactions in order to fully account for how it operates and integrates with the respective sign/speech stream. Finally, in Chapter 6, I turn to the speaker-hearer relationship and discuss two phenomena oriented directly to it: gestural mimicry/mirroring and the Open Hand Palm Up interactive gesture. The meanings of these embodied forms can only be explained by close examination of the intricacies of
interaction. I argue that these forms and behaviors provide even further evidence that hearing and deaf people orient their bodies and craft embodied discourses in similar ways.

Expanding our analysis of gesture to incorporate situated discourse allows us to talk about gesture in a more nuanced way--one that will ultimately inform the discussion of the static-dynamic elements of language across modalities. To accomplish this, we must also reframe how we view *signs*, from what has traditionally been considered a dyadic relation to a triadic one (Peirce, 1955). The analysis is weighty--it involves looking at gesture instantiations as closely as we do speech/sign and accounting for how these moves help construct a broader interaction. I have found, and hope to show, that when we account for the complex way gesture contributes to discourse in interaction, we are able to incorporate the variety of forms and functions gesture takes in both spoken and sign languages.
CHAPTER TWO
A THEORETICAL FRAMEWORK FOR ANALYZING
GESTURE, SIGN, AND INTERACTION

2.1 Introduction

This study is an examination of gesture in interaction. But it is also an examination of how two
different ways of seeing gesture (as potentially linguistic or exclusively paralinguistic) drives
our understanding of its function. I examine gesture in multiparty interactions as opposed to
dyads because more complex relations emerge when more than two participants engage (Sacks,
Schegloff, & Jefferson, 1974) creating more opportunities for management through the body. I
draw from three main bodies of literature in approaching this work. First, I employ techniques
from research on sign languages that require close consideration of behaviors of the body as
potential linguistic markers of meaning. Second, I incorporate research on gesture as it is
understood to emerge in spoken language--placing special emphasis on gesture in interaction
and semiotic treatments of embodied interaction. Finally, I use methodological and theoretical
constructs from interactional sociolinguistics as a means of integrating gesture into a wider
umbrella of understanding language in interaction.

I begin this chapter with a very brief orientation to the American deaf community7 (Section
2.2) and then discuss treatments of gesture and iconicity in ASL (Section 2.3). I frame the
discussion of the relationship between gesture and sign as at least partially influenced by

7 Deaf people who use ASL and consider themselves culturally deaf (even if audiologically hard of hearing) are
typically represented with the uppercase “D” while the lowercase “d” is reserved to describe people with
audiological hearing loss. I depart from using this classification simply for practical reasons since this dissertation
only concerns deaf people who sign. Future research might account for gesture in language would be to broaden the
analysis to include discourses of non-culturally deaf people.
cultural constructs of what it means to be hearing and deaf. In Section 2.4, I turn to co-speech gesture theory and discuss studies that have defined its form and function in relation to spoken language. I introduce this section with a discussion of McNeill’s (1992) typology of gesture that has strongly influenced the definition of gesture in both modalities. In Section 2.5, I specifically address studies on language in interaction, starting with interactional sociolinguistics and studies of language in interaction, then examining a set of studies where gesture in interaction is the subject of focus. I then review works that incorporate Peircean semiotics in the analysis of multimodal interaction. Finally, in Section 2.6, I outline the integration of these fields and the approach I take here in this study.

2.2 Orientation to ASL and the American Deaf community

In 1817 Laurent Clerc, a deaf French man, and Thomas Hopkins Gallaudet, a hearing American man, established the first school for the deaf in the United States and the American deaf community was forever changed. Their story is well-known in both American and French deaf communities, a sort of creation myth where French Sign Language (LSF) mixed with the signs used by American deaf people at the time resulting in a distinctly American sign language. ASL has historical ties to LSF but it is a distinct language today, used throughout the U.S. and Canada. Sign language is not a universal language, as many mistakenly believe, however ASL in particular holds a sort of privileged status (like English) as one of, if not the, most studied of the world’s sign languages.

The contemporary deaf community is multi-dimensional and evolving. As advances in technology, changes in educational practices and shifting views of disability and deafness take
shape, deaf people and their language are also rapidly changing. Deaf people who use ASL constitute a smaller percentage of the population of people with hearing loss. Culturally deaf people tend to cluster around larger communities based on employment and/or educational opportunities. During World War II, Akron, Ohio had a significant population of deaf people who worked at a tire factory whose hearing employees were dispatched to the war. Today, Washington, D.C. has one of the largest deaf populations because of Gallaudet University, several primary and secondary schools for the deaf, and the employment opportunities afforded by the federal government. It is worth noting, these clusters do not generally center around deaf people’s biological families; roughly 96% of deaf people are born to hearing families (Mitchell & Karchmer, 2004). Unlike other linguistic minorities, then, deaf people typically acquire their language and culture outside their nuclear families.

The cultural conceptualization of what it means to be deaf and hearing is indirectly implicated in the tangled relationship between sign language and gesture. Along with deaf people’s marginalization over the years, sign language has been pejoratively linked to gesture so that sign has been treated as unstructured, exaggerated, and uncouth especially historically but also to some extent today. As concerns scholarly pursuits, over the past several decades, frameworks and methodologies for analyzing sign have been implemented, tweaked, and improved upon to demonstrate the highly structured patterns of linguistic behaviors that leave no doubt sign languages are indeed linguistic systems. Yet, there remain unmistakable connections between sign and gesture that are increasingly difficult to overlook.

All of this is not to say that vindicating sign language was easy (I go into the course of that debate next, but see also Taub, 2001). For now, it is important to know that the association
between gesture and sign language continues to be laden with cultural and even political baggage which has in turn impacted scholarly treatments of gesture in sign.

2.3 ASL, gesture and the ‘iconicity problem’

I turn now to discuss the various ways in which gesture and iconicity have been treated by linguists studying ASL (and sign languages at large). In this section, I present some of the earliest treatments of ASL (e.g., Frishberg, 1975; Klima & Bellugi, 1979; Liddell & Johnson, 1989) where iconicity, visual imagery, and gesture in general are relegated to the periphery of sign language in an attempt to create an undisputed link between sign and spoken languages. These treatments have since been called into question in contemporary studies (e.g., Taub, 2001; Liddell, 2003; Liddell & Metzger, 1998; Schembri, 2003) where linguists apply a variety of theories to explain how these very features (iconicity at the morphological level, visual imagery in constructed action, use of space in referential deixis, and depicting constructions) are both prevalent and productive in sign language. I discuss the more general treatments of iconicity and visual imagery in ASL before detailing contemporary works that target these features as specific instantiations of gesture and gesture-like qualities in sign. I conclude this discussion with my claim that these works serve as a preliminary assessment that, while fruitful, have reached an impasse in fully accounting for gesture in sign language.

2.3.1 Early treatments of iconicity in ASL

Unlike Peircean semiotics which defines icons (and all sign phenomena) in terms of a three-part relation between a sign, object, and interpretant (the reaction the sign evinces), the earliest
works on sign language were driven by a distinctly Saussurean conceptualization of iconicity as a binary relation between form and meaning.

William Stokoe (1960) was the first American to analyze ASL as a linguistic system by describing signs as composed of discrete parts like phonemes. He, with Casterline & Croneberg, (1965) were the first to write a dictionary of ASL that parsed individual signs by handshape, movement, and location of production (commonly referred to as parameters) which pattern like the smallest units of sign language. Stokoe’s work was the first to show that sign languages could be analyzed similarly to spoken language. Stokoe, et al (1965) also noted possible origins of many signs in the dictionary as rooted in gestural symbols and icons.

The next generation of research focused not just on studying sign language but also on vindicating its status to spoken language scholars. At the time, most scholars (not to mention deaf people) continued to believe that signs were “simply” glorified gestures. The earliest works on ASL (e.g., Frishberg, 1975; Klima & Bellugi, 1979; Battison, 1978) were in part responses to Saussure’s langue/parole distinction where proving the “arbitrariness of the sign” was paramount to proving ASL’s linguistic status. These studies borrowed spoken language theories partly as a matter of practicality; no other framework had been developed to explain language that was articulated through the body. But these works also reflected scholars distancing ASL from its association with (the pejorative) gesture. The underlying assumption that fueled these analyses was that iconicity and visual imagery belonged to gesture and gesture was not

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8 Stokoe developed a distinct typology for signs (calling phonemes cheremes, for instance) attempting to distinguish the analysis of sign languages from spoken-based paradigms but the typology never gained favor among linguists.

9 Battison (1978) later added hand orientation as another parameter necessary in the analysis of phonological distinctions.
linguistic, therefore gesture could not play a central (or even peripheral) role in sign language’s structure.10

Nancy Frishberg’s (1975) work was one of the most notable to push forward this argument. She examined the issue of iconicity and arbitrariness in terms of ASL’s historical relationship to LSF through comparisons of signs from old LSF, old ASL and contemporary ASL. Frishberg documented formational changes in sign production to demonstrate signs became less iconic over time, categorizing these changes in five evolutionary tendencies: 1) the tendency for signs to become centralized in sign space (either close to the center of the face or close to the meridian of the body); 2) the tendency for lexical content to shift from the face or body to the hands; 3) the tendency for hands, when configured in two different shapes or moving in two different directions, to assimilate; 4) the tendency for multipart (compound) signs to become one sign; and 5) the tendency for certain parameter values (such as the hooked handshape) to become arbitrary markers of classes of signs (sign families).

I call attention to Frishberg’s use of “evolutionary” to describe these tendencies because it invokes the idea of a progression from primitive to fully evolved forms, one that is echoed in contemporary works on gesture (Section 2.4). Sign researchers are beginning to challenge this notion that iconicity in sign language evolves out of it over time (e.g., Cormier, et al, 2012), partly in response to works by gesture theorists who, unencumbered by the need to denounce iconicity, view its function through a less politicized lens.

For example, Gerwing and Bavelas (2004), while exclusively focused on spoken language gesture, indirectly challenge principles upon which analyses of ASL have been

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10 This is not unlike the paralanguage classification of voice quality in spoken language (cf. Sicoli, 2007, 2010).
founded. Their work analyzing discourse in interaction documents clear evolutions of gestures used to communicate new information versus information already salient to a conversation. They tracked the ways in which gestures used to refer to one thing altered as they were used throughout the discourse and found that,

“physical representations of information faded over time. Just as given information fades prosodically in spoken language reference, given information became less salient physically. As this pattern continued, gestural depictions of given information became more and more schematic over the course of the short dialogue” (181).

They found that a gesture whose form was originally depictive lost its iconicity later in the interaction, retaining only the location in space where it was originally housed (177).

Frishberg’s account of the phonological processes of reduction and assimilation captures one half of this process, then. Gerwing and Bavelas describe the shift, not as triggered by pressures to become more arbitrary over time, but in reaction to a dynamic information state. That is, the emergence of depictive, iconic forms is sensitive to their contextual instantiations not in response to an underlying pressure to abandon iconicity. The distinction here is crucial because it reintroduces the productive (indeed powerful) role that imagery and iconicity plays in sign and spoken discourse. It also shifts attention to the function of these forms in language--an approach I further in my analysis in this study.

Klima & Bellugi (1979) describe the morphological processes that “override” and “submerge” the iconicity inherent to signs. In their famous example of the sign SLOW, where one hand slowly moves along the back of the other hand/arm, they describe the intensification of the sign as rupturing the link with its iconic roots (30). To sign “very slow”, a signer moves the hand in a short and rapid movement (not a slow and elongated one). I would add that the meaning of this particular instance of intensification is more accurately interpreted as the signer
evaluating something as being slow (as in, a signer complaining ‘that computer is very slow!’). In other words, by using this instance of the sign, the signer is foregrounding the intensity of the experience as noteworthy over the actual slowness of the computer. Depicting slowness, on the other hand, where the slowness of the computer becomes noteworthy, would foreground a slower movement of the hand. The authors acknowledge this variability in forms. They say, “Deaf people are acutely aware of the undertones and overtones of iconicity in their vocabulary….deaf signers often extend, enhance, or exaggerate mimetic properties; colorful signing and plays on signs are sometimes based on elaborations of their mimetic character” (33). They allow for a degree of iconicity that spoken languages do not have but they characterize the presence of iconicity in sign language as a paradox, concluding that “signs themselves exhibit two faces: the iconic, representational aspect and the formal, componential arbitrary aspect” (34).

Though most of the works analyzing ASL from the 1960s -1990s set out to account for ASL’s phonology, morphology and syntax according to spoken language constructs, Asa DeMatteo (1977) contested the obfuscation of gestural elements in sign language. He argued that visual imagery was in fact a central part of ASL structure, so much so that the language could not be properly explained without it. Remarkably, in light of the views his contemporaries espoused, he argued, “Sign is a language of pictures--a fact that the deaf accept as common sense but the vocal-language-based linguist accepts only after all other conceptualizations of the grammar fail” (111).

DeMatteo’s ideas were not embraced, needless to say (see Liddell, 2003 for a discussion) but even with his willingness to incorporate visual imagery into descriptions of ASL, DeMatteo
encountered difficulty describing where sign language fits. He explicitly asserts that sign is not simply pantomime but rather a sort of “conventionalized gesture” and that “iconicity and conventionality are in no way polar opposites” (120). This claim echoes Peirce’s (1955) conceptualization of icons, indices, and symbols as a nested hierarchy, where even the most highly conventionalized symbols contain within them traces of indices and icons. DeMatteo says “the signer’s first response--his first intuition, if you will--is to choose the more visually based representation choosing descriptive signs or mimic signs in order to create an icon in the sign space” (121). So, he at once rejects the term *pantomime* as descriptive of ASL and simultaneously invokes it (“mimic signs”) to characterize its lexicon. DeMatteo’s analysis is more attuned to the actual production of ASL by deaf people but it does not explain how signs straddle the boundary between language and gesture.

Already, we see the challenge of addressing the gesture-sign dialectic as at least partially rooted in terminology. These early authors view iconicity or visual imagery as what distinguishes sign language from spoken language. But *iconicity* is a sort of red herring. To interchangeably use the terms *iconicity* (which is a mode of sign), *mime* and *pantomime* (which is a set of actions), and *gesture* (which encompasses the broad range of symbolic uses of the body) is itself problematic. Each of these refers to different aspects of visual imagery as manifest in the physical body but are lumped together under the auspices of delineating a boundary between what is linguistic and what is not.

More recent analyses of ASL have shifted somewhat in the treatment and definition of *gesture*. I turn next to address why I view these analyses as influenced by early works that

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11 I further examine this particular claim--that signers are wont to produce the most iconic rendition of a concept--in Chapters 4 and 5.
equate gesture (particularly gesture in sign language) with iconicity. I then discuss what we might gain from research on co-speech gesture especially as concerns the fixation on iconicity as the sole (or main) gestural feature in sign.

2.3.2 Shifts in treatments of iconicity in ASL

In the last fifteen years, sign language linguists have become more explicit about the source from which visual imagery derives (namely co-speech gesture). It is now generally acceptable to assert that gesture plays a partial role in sign language discourse (Taub 2001; Liddell 2003; Cormier, et al 2012; Schembri, et al 2005; Vermeerbergen & Demey, 2007; Mehta & Quinto-Pozos, 2010; Duncan, 2003). Most of these scholars address a select set of constructions that have presented issues to linguistic analyses of sign language in the past, namely iconicity at the morphological level (Taub, 2001), visual imagery behind constructed action (Liddell & Metzger, 1998; Liddell, 2003), use of space in pronouns and indicating verbs (Liddell & Metzger, 1998; Liddell, 2003), and depicting constructions (Schembri, 2003; Cormier, et al 2012). I briefly summarize the findings of these studies before transitioning to the discussion of accounts of similar constructions in spoken language gesture.

When we consider all that gesture is and does in spoken language, iconicity is but one descriptor of a broader swath of forms (cf. McNeill, 1992, 2005). But because iconicity drew the most attention in the 1960s and 1970s (see Kendon, 2008 for a review of the development), it is subsequently receiving the most attention now, as researchers seek to correct the biases introduced earlier. Coming from a perspective rooted in cognitive linguistics, Liddell (2003) argues for an integration of lexical, gradient, and gestural components in the linguistic analysis
Comparing gesture in ASL to the intonational contours in speech (a comparison Okrent (2002) also makes), Liddell asserts that intonation is not simply overlaid on speech but is instead “a central aspect of the construction, which does not exist without the proper suprasegmental features” (361). Analogously, certain units of body behavior are central components of ASL utterances, so central that the construction cannot exist without it. He argues that there is no evidence that signers pay less attention to gestural aspects of utterances than to lexical ones and that separating the two is less important than acknowledging that “the gradient and gestural aspects of the signal are not peripheral or paralinguistic. They are required to be present and central to the meanings being expressed” (362).

At the morphological level, iconicity is a significant driver behind the forms of many signs. In response to earlier works like Frishberg’s, Taub (2001) describes iconicity as a visual abstraction of conceptual entities where some element of the object’s real-life form is depicted. For example, “tree” is iconically represented in ASL by the left arm laying prone in front of the signer’s body with the right arm held upright, its elbow touching the back of the left hand, with fingers spread open. Select elements of a tree—the shape of the tree’s trunk and branches in addition to the ground on which the tree sits—are represented in this form. Japanese Sign Language, on the other hand, uses two crescent handshapes with palms facing each other to depict the girth of the tree’s trunk. Both signs are iconic but select different elements to represent the concept. Iconicity is efficient and effective in sign language, Taub argues, it is well-suited to a modality that is visibly manipulable. Taub’s approach to analyzing iconicity makes explicit the relationship signers create between real-world objects and discourse-world forms which can extend to representations of action, people, and even non-visible phenomena.
like emotions. Taub’s work elevates the status of iconicity by demonstrating its systematicity and its variability as a product of the human experience.

Taub does not expand on Peirce’s understanding of signs as a triadic relation (though she does mention the theory). Interestingly, she interprets Peirce as undermining iconicity in the language domain: “Peirce (like de Saussure) discounted the importance of iconic images to language while acknowledging the importance of iconic diagrams in motivating syntactic forms” (36). I will delve deeper into Peircean semiotics in Section 2.5.2 but for now it is worth noting that Peirce viewed iconicity as a part of language even in forms that were highly conventionalized.

There is a class of verbs in sign language (like TELL, HELP, and BLAME, Fig. 2.1) where the direction of the sign’s trajectory indicates the location(s) of the subject and object.

For some time, these forms were called directional verbs but are now referred to as indicating (or agreement) verbs because their movements indicate from whom the action derives and to whom the action is aimed. Pronouns also indicate their referents in this way; signers signal referents by pointing to them (if physically present) or pointing to a locus in space (that becomes associated with that referent). Indicating verbs and pronouns are difficult to account

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12 All illustrations were drawn by Carole Marion unless otherwise noted.
for using spoken language constructs (that exclude gesture). Liddell (2003) proposes that parts of these signs’ linguistic architecture are left “unspecified” until they emerge in actual discourse at which point meaning solicited from real world stimuli (like a person physically seated in the room) or depiction (e.g., through a surrogate or token) fills in the blank.

Liddell & Metzger (1998) examine deixis and constructed action in the same way: as incorporating gesture as a necessary (but non-linguistic) component of sign language. Constructed action is a common feature in signed discourse (Winston, 1995); signers imagine entities are present around them and direct their signs to these entities or even interact with them as if they were located in that space. Streeck (2002) examines the same phenomenon in spoken language discourse but calls it body quotation, “a dramaturgy--a skillfully timed sequencing of reanimated words and reanimated actions that will keep the audience engrossed” (591). Liddell & Metzger borrow from a concept in cognitive linguistics called mental space (Fauconnier, 1985; see also Dudis, 2004) to explain this particular use of space. The signer uses the actual space around her to project concepts from her mental space. She can then interact with real space thus creating a meaningful, spatial representation of concepts in her head. This melding of mental and real spaces is one kind of blend, a gesture/sign hybrid (essentially) that demonstrates how signers can pull from linguistic and gestural resources simultaneously (Fauconnier & Turner, 2002).

Another construction shown to incorporate gestural elements is the depicting verb (Liddell, 2003; also referred to as classifiers, classifier constructions, or polycomponential verbs (Schembri, 2003: 4)). These constructions function like verbs whose physical components represent meaningful units unrelated to the predicate. For example, a handshape that is visually
analogous to its referent combines with a movement that depicts the referent’s size, shape, or movement through space. These constructions have also been difficult to explain (see Liddell, 2003; Schembri, 2003; and Supalla, 2003 for a variety of perspectives) because they rely so heavily on physical enactments of events using gradient, unspecified forms. Though some depicting handshapes are conventionalized such as the handshape used to refer to vehicles (where the thumb, index, and middle fingers are raised) most forms closely resemble their associated referents in some way. In other words, these constructions combine conventionalized components with more gradient elements.

Cormier, et al (2012) analyze depicting verbs as an instance of gesture in sign but suggest using the term *depicting constructions* "to reflect the possibility of more gestural, less lexicalised productions (which may be used by signers or non-signers)" (334). In response to Frishberg’s work, they argue that there is "very little evidence" that the existence of both iconic and arbitrary lexical items was a result of historical evolution. Instead, they say, “[s]igners are able to alternate between the articulation of certain core lexical items and decomposed forms which function as related depicting constructions” (334). Co-speech gesture, then, is proposed as a possible theoretical remedy for explaining the variability evident in depicting constructions. But, because these authors draw from McNeill’s (1992) “Kendon’s Continuum” (which is founded on the principle that gesture is co-expressed with speech) they conclude that "this characteristic [co-expression] is not relevant for sign languages" (342). Instead, they propose two alternate continua specifically tailored to sign language "to account for the two main types of depicting constructions and their different gestural origins" (342).
These authors return to the continuum as a place to draw a boundary between language and gesture, largely for the methodological issue of transcription. Because sign languages do not have orthographies, linguists rely on glosses to transcribe signs, thus creating pressure to classify forms into linguistic and non-linguistic categories. Depicting constructions make this boundary-creating difficult. But when we look too closely at a form (signed, gestured or a hybrid) we only see part of the bigger discourse picture. Once we move away from the morphological level of analysis, we are forced to contend with gesture's interface with language at an utterance-level. What I appreciate about these authors' argument is the shift from a one-way evolution on a continuum to a dynamic movement where "signers may choose forms which may lie closer to the lexical end or to the gestural end of the continuum" (344). The remaining question to address is how these choices might be made and what drives a preference for using a particular form.

There remains a reticence to claim that gesture functions similarly in sign as it does in speech (Liddell, 2003; Emmorey, 1999; Emmorey, Xu, Gannon, Goldin-Meadow & Braun 2007; Supalla, 2003). Stated differently, many researchers have thus far allowed that gesture plays a limited role in sign but that it must still be distinct from gesture in spoken language. The main distinction (in Peircean terms) is that the gestural forms in sign language are those that have been considered having iconic and indexical properties while the linguistic forms are considered having symbolic properties. Part of the impetus in creating distinctions between gesture and language is in fact a product of the linguistics of the spoken language modality: co-speech gestures occupy a separate, clearly delineated modality thereby freeing hearing people to produce gestural forms while simultaneously speaking and then “freeing” spoken linguists from

The idea of simultaneity, which is to say, that hearing people *simultaneously* gesture whereas deaf people can only do so *sequentially*, has become the crux of the argument for distinguishing between co-speech and “co-sign” gesture. Yet, it is this simultaneity that characterizes the hybrid forms discussed above. While many associate co-speech gesture with manual forms, *gesture* includes all symbolic uses of the body’s articulators. So, although there appears to be a clear distinction between gesture and language, with some unpacking, there is less of a contrast than first allowed.

To summarize, early treatments of ASL demonstrated linguistic properties in comparison to spoken language (sans gesture). These works discounted iconicity and visual imagery to make such claims. In more recent years, scholars are returning to iconicity and visual imagery as powerful and productive communicative resources in sign language. Some authors have incorporated co-speech gesture analyses in comparison to sign languages, however, these authors have focused almost entirely on deixis and the highly iconic, depictive forms to the exclusion of other possible functions that gesture serves in spoken discourse. None of these authors has applied Peircean semiotics to analyze sign discourse.¹³

I turn now to examine gesture as it has been analyzed in spoken discourse. These studies face a different challenge than the ones discussed thus far--not parsing gesture from the

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¹³ Liddell (2003) incorporates a reference to Peirce in his discussion of indexical signs in ASL.
linguistic code but integrating gesture into it. These studies also offer a different set of empirical data which introduces alternate ways of seeing gesture.

2.4 Co-speech gesture: Defining gesture and its function in spoken language

Defining gesture in spoken language discourse is less complicated in terms of form but in terms of function, the task has proved more elusive. Various authors have dealt with the reconciliation between gesture and speech in different ways. In his groundbreaking work on kinesics, Ray Birdwhistell (1968) describes language as a “multichannel system” (380) where body behaviors, like phonemes, are dependent upon other units of behavior to construct meaning. Due to the co-dependence of speech and gesture, he argues, we cannot understand the meaning of gesture or speech without the context in which these coordinated movements occur. Condon & Ogston (1967) build on this notion by defining a unit of behavior as “the occurring and sustaining together of a variety of changes through a given moment” (224), irrespective of what form that change takes. More recent works on gesture in spoken language have demonstrated a slight shift in the treatment of gesture. I first discuss the definition of gesture as individual units constituting an array of forms ranging from highly schematic to highly concrete.

2.4.1 Defining gesture

Though gesture has been studied for some time for its role in communication, contemporary gesture research has been strongly influenced by the works of Adam Kendon and David McNeill who each come to gesture from very different paradigms. Kendon (1972, 1988, 1997, 2004, 2008) views gesture from an anthropological and discourse analytic lens, while McNeill

Kendon, in his more recent work (2004, 2008) analyzes gesture as symbolic units of meaning ("visible action as utterance") rooted in historical and cultural contexts and integrated as a part of language. For example, he documents "families" of manual gestures that share metaphorical information and have become conventionalized, such as gestures produced with the ring handshape that are typically used when speakers signal some sort of precision in their talk. Frishberg (1975) introduced a similar concept she called *sign families* where certain handshapes carried a shared meaning, like the hooked handshape used in signs associated with notions of hardness. Frishberg analyzed this phenomena as evidence of arbitrariness whereas Kendon proposes that the shared formational characteristic is an example of imagery and metaphor in co-speech gesture. Two different accounts of the same phenomenon in sign and speech are driven by the perceived mandate to discount imagery (in sign) or unveil it (in speech).

McNeill comes to the study of gesture from a different but not incompatible perspective. He argues (1985) that "the whole of gesture and speech can be encompassed in a unified conception with gesture as part of the psychology of speaking, along with, and not fundamentally different from, speech itself" (351). Coming from a psycholinguistic perspective, McNeill’s data are typically collected in a lab where subjects recount the events of a cartoon to a naive listener. He then analyzes the close synchrony of gesture-speech pairs which he characterizes as evidence of an underlying cognitive mechanism (the Growth Point) where gesture and language are integrated. His work clearly demonstrates that neither speech nor
gesture can fully express the intended meaning of speakers; both modalities co-express and must be treated as one unit. Two key components of his understanding of co-speech gesture are 1) the temporal synchrony with which manual gestures and speech are executed (that is, their co-expressiveness) and 2) the non-linguistic characteristics of gestures that are based on imagery.

One of the hallmarks of McNeill’s earlier research (1992) is the continuum he named for Kendon (1988) who described gesture as a range of forms. Kendon’s Continuum (which McNeill repurposes in 2005) schematizes the variability in gestured forms as points on a spectrum from the forms that emerge with speech (gesticulation) to those that do not (sign language).

<table>
<thead>
<tr>
<th>“Kendon’s Continuum” (McNeill 1992)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gesticulation → Emblem → Pantomime → Sign Language</td>
</tr>
</tbody>
</table>

**Figure 2.2: Continuum of gestural forms from least to most linguistic**

McNeill is concerned with examining the nature of the leftmost extreme of this continuum--gesticulation. He establishes distinct categories of gesticulated forms: iconics, metaphorics, emblems, deictics and beats. In later work (2005), he reassesses the need to categorize gesticulations in absolute terms and proposes instead that we describe their dimensions to incorporate a variety of functions in one form (for example, a metaphoric gesture that also functions as a beat).

Of the forms schematized in the continuum, *gesticulation, pantomime,* and *emblems* are treated as isolated units contrasted, not to signs as would be most fitting, but to sign *language.*
Rather than comparing a class of highly standardized (segmented and analytic) signs to the range of gestural forms listed here, McNeill extrapolates characteristics of isolated signs (the example he uses is the sign TREE, 2005) and applies those characteristics to the entire language. In sum, unlike Kendon, McNeill finds pantomime, emblems and sign language to be less relevant to (or at least operationally distinct from) the way gesticulation operates with speech.

Kendon is also interested in gesture’s link to language and, though implicated in the continuum McNeill named for him, takes a significantly broader view of gesture’s role in language in interaction. Most recently (2008), he explicitly criticizes McNeill for focusing too much on the internal mechanisms behind gesture’s forms (358) and suggests that we examine bodily action from a semiotic perspective to integrate gesture in the language domain. He asserts,

"Rather than ask this question [do signers gesture?], it would be better if we undertook comparative studies of the different ways in which visible bodily action is used in the construction of utterances, whether this is done by those who combine such actions with speech or by those who do not. Such an approach would reveal the diverse ways in which utterance contributing visible bodily actions can be fashioned and the diverse ways in which they can function from a semiotic point of view" (359).

Kendon moves, then, from what he sees as analytically archaic views that reinforces gesture as fundamentally distinct from speech toward an analysis that not just situates gesture in the realm of communication but, more compellingly, situates it in language proper.

While much of the research on gesture is influenced by McNeill’s definition of gesture, several authors examine gesture for its behavior in interaction (e.g., Bavelas, 1994; Chui, 2009; Kimbara, 2006; Gerwing & Bavelas, 2004; Gerwing & Allison, 2009). These authors typically apply some variation of discourse analysis to uncover gesture’s function, providing a broader
understanding of manual forms but also alternate methodologies that document language as it emerges in natural discourse. In the next section, I turn first to address works that provide the foundation for analyzing talk in interaction before examining studies of gesture in interaction. These scholars are interested in examining how people construct discourses, make their talk relevant and coherent, and signal pragmatic moves like stances. I then summarize the works of scholars who situate gesture in the realm of language in interaction.

2.5 Interactional sociolinguistics, discourse analysis, and treatments of gesture

Interaction influences language in significant and systematic ways. Interactional sociolinguists, drawing from seminal works on culture and communication, specifically target interaction as a unit of analysis to uncover the particularities behind what interactants do, what they intend, and what they accomplish through their talk. Conversations, from this perspective, are described as a specific type of discourse characterized by joint productions where interactants engage in the giving and receiving of information to mutually achieve some desired end (Davies & Harré, 1999).

In this section, I broadly review contributions of Dell Hymes, John Gumperz, and Erving Goffman and Deborah Schiffrin’s (1987) model of discourse coherence. I then discuss research that analyzes gesture from a similar lens. These works show that gesture has long been considered a player in signaling speaker and addressee comprehension of an interaction but has suffered from a lack of focused attention by analysts who still view speech (if not in theory, then in practice) as the dominant driver behind interaction.
2.5.1 Language in interaction

Hymes (1964) draws heavily from anthropology and linguistics, calling for an ethnographic approach to the study of language in speech communities. Hymes’ approach entails bringing the communicative event, and all of the related symbolic materials speakers incorporate, to the fore. In order to make sense of a specific utterance, Hymes maintains the analyst must first start with the “communicative habits of the community” (11) thus implicating a broader sociological construct in the analysis of linguistic behavior.

Largely in response to Hymes’ work on integrating ethnographies into analyses of language, Gumperz (1982, 1992, 1999, and also Goffman, 1981) proposes several constructs that explain how interactants interpret utterances in situ. One of these structures is frames which Gregory Bateson (1972) famously describes in his account of the behaviors of primates signaling play. Frames have been described as "structures of expectations" (Tannen, 1993) that constitute and are constituted by our experience in the world (Gumperz, 1992:41). Gumperz (1992) conceives of frames as a tool that segments larger social situations into smaller pieces. Identifying frames in an interaction helps to explain the motivation behind specific utterances (Tannen, 1993; Tannen & Wallat, 1983), especially since most utterances do not explicitly mark interactional underpinnings. Part of dissecting frames in an interaction involves analyzing contextualization cues, which Gumperz defines as "empirically detectable signs" (42) that "construct the contextual ground for situated interpretation" (461). Tannen (1993) presents a slew of discourse features that provide evidence that participants are attuned to frames like omissions, repetitions, backtracks, hedges, modals, inexact statements, inferences, evaluative language, and moral judgments in addition to nonverbal markers.
Frames are also reified through the various roles and positions interactants take as talk unfolds. Goffman’s (1979) work on footing introduces important distinctions of these basic communicative nodes (speaker, addressee) based on the roles interactants dynamically embody during an interaction. The medium through which such information is conveyed is not strictly verbal; nonverbal behaviors of the body are particularly well-suited to marking shifts in footing. Because people do not typically assume one position throughout interaction, including the canonical speaker/hearer roles, Goffman presents an approach to analyzing interaction as composed of utterances each of which “opens up an array of structurally differentiated possibilities, establishing the framework in which the speaker will be guiding his delivery” (11).

Expanding on these earlier works on language in interaction, particularly Goffman’s notions of frames and footing, Davies and Harré (1999) present a detailed account of conversation as a “structured set of speech-acts” wherein participants “make (or attempt to make) their own and each others’ actions socially determinate” (34). The social determinacy of the interaction is accomplished by interactants positioning themselves and each other as they construct, what the authors call “fragments of a lived autobiography” (39). Rather than adopting the influence of roles on interaction, these authors argue for applying the notion of positions and positioning as the “central organizing concept” (52) of interactions where individuals mark their relationships to each other through talk. Emergent positions are thus constantly in flux, projected through both verbally-produced utterances and nonverbal moves.

Schiffrin (1987) takes these foundational works further by providing a model of discourse that captures the range of interactive demands people orient to during face-to-face interaction. Creating a coherent discourse, she says, is "defined as the outcome of joint efforts from
interactants to integrate knowing, meaning, saying and doing" (29). Schiffrin expects that interactants use linguistic and nonlinguistic devices to conduct this interactive work, however her research aims specifically at verbal discourse markers like *oh*, *well*, and *so*. Discourse markers help to make an interaction work by mapping or “situating” a speaker’s utterance in response to prior talk. Schiffrin conceives of the integration of “knowing, meaning, saying and doing” as occurring within and across five planes of discourse: the exchange structure, action structure, ideational plane, participation framework, and information state. I expand on these five planes next.

The exchange structure contains units of talk labeled "turns" or moves but can also include adjacency pair parts like question-answer units. The action structure constitutes speech acts that "are situated--not only in terms of speakers' identities and social setting, but in terms of what action precedes, what action is intended, what action is intended to follow, and what action actually does follow" (25). The ideational structure consists of semantic propositions or what she calls simply "ideas" (26). Schiffrin notes that there are three different relations between ideas that contribute to idea structures: cohesive relations (where interpretation of one element is predicated on a prior clause), topic relations (where ideas are organized into topics and subtopics), and functional relations (the roles that ideas play in the discourse, such as an introduction to a narrative) (26). The participation framework--originally introduced by Goffman (1981)--consists of "the different ways in which speaker and hearer can relate to one another" and also "the ways in which speakers and hearers can be related to their utterances--to their propositions, acts, and turns" (27). It is within the participation framework that interactants take stances, establish their footing, and signal affiliations with (or oppositions to) each other.
Finally, the information state concerns interactants’ management of knowledge and meta-knowledge that emerges dynamically throughout interaction (28).

The complex integration of these planes is where Schiffrin sees discourse markers serving an important role as they signal different aspects of how participants position themselves and frame their talk in relation to immediately prior talk but also to the broader interaction. Understanding these planes and the sorts of constructions that elaborate them contributes a structural framework in which we can consider nonverbal behavior. Enfield’s (2009, 2011) notion of composite utterances, for example, can be explored in terms of what the different articulators (hands, eyebrows, torso, etc.) accomplish on these planes of discourse. I turn next to discuss select works that expand on gesture as one of the symbolic resources used in interaction and then discuss the works from a group of scholars who apply Peircean semiotics to analyze gesture in interaction.

2.5.2 Gesture in interaction

Some of the earliest work on gesture comes from analyses of physical manifestations of footing, positioning, framing and turn-taking. Goffman (1979) includes the body as playing a central role in interaction, especially multiparty interaction. He says,

“In the management of turn-taking, in the assessment of reception through visual backchannel cues, in the paralinguistic function of gesticulation, in the synchrony of gaze shift, in the provision of evidence of attention (as in the middle-distance look), in the assessment of engrossment through evidence of side-involvements and facial expression—in all of these ways it is apparent that sight is crucial, both for the speaker and for the hearer. For the effective conduct of talk, speaker and hearer had best be in a position to watch each other” (6, Emphasis added).
Albert Scheflen (1973) examines symbolic moves of the body like the use of raised eyebrows, head, and index finger by a (hearing) man asking a question (49). Scheflen also found interactants shift physical postures in tune with shifts between major topics in a conversation (50-51). Schegloff & Sacks (2002) expand on this work showing how postural shifts help regulate turn-taking sequences during conversations. They found “a very large number of [body] moves and sequences of moves” (137) that began and ended in the same physical place which they call the speaker’s home position. They discuss these corporal positions as a systematic structuring of conversation. Scheflen also characterizes postural shifts as evidence of an underlying structure of human activity: "In all activities the physical positions and orientations of the participants bound and frame the site of action, and shifts in the postures of group members indicate the various plays or steps" (55). Notice here, the body is foregrounded as a potent marker of the structure of discourse. Without realizing it, people co-create talk and signal attunement to structured expectations (Tannen, 1993) through language and their bodies.

Keli Yerian (2000) applies techniques of discourse analysis and ethnography to examine the integration of language and the body during a series of self-defense classes. Borrowing from Kendon’s (1985:215) definition of gesture as “any distinct bodily action that is regarded by participants as being directly involved in the process of deliberate utterance” (Yerian, 2000: 91), she coins the term discursive body to locate the body “as a site for the integration of vocal and non-vocal interactional strategies in activities involving communicative endeavors”(6). Thus, as opposed to prioritizing the speech stream as the primary means by which interactants create a discourse, Yerian shows how interactants in her data integrate gesture to streamline focus on
different parts of the body while demonstrating specific self-defense moves. Her close analysis demonstrates that interactants use the body as both a subject of talk and a medium through which talk is advanced.

Focusing primarily on manual forms, Janet Bavelas (1994) defines *interactive gestures* as those that “refer to the addressee and provide no information about the topic-at-hand” (1994: 213). Bavelas proposes a typology to account for gestures whose functions she labels Delivery, Citing, Seeking, and Regulating. She calls attention to the fact that interlocutors signal digression from a main point or share information through delivery gestures, and solicit another’s agreement or seek help for a particular word or phrase through seeking gestures. Bavelas makes an important and clear claim “that one of the main functions of a speaker’s gesture is linguistic, that is, to help convey meaning to the addressee in an immediate conversational context” (202). This class of gestures in particular represents forms that operate “very much like words or phrases in spontaneous conversation” (202).

Though Bavelas does not detail specific gestural forms, others have found certain gestures that align with their interactive functions metaphorically, such as the Open Hand Palm Up gesture (e.g. Kendon, 2004; Ferré, 2011) that has been described as symbolically transferring information from sender to receiver as if tossing an object (Kendon, 2004). Bavelas’ work does not explicitly link interactive gestures with features of discourse such as stance taking, footing shifts, or discourse markers. However, it is clear, especially in the verbal paraphrases she offers in her typology, that these gestures are capable of marking these elements at least in addition to speech, if not exclusive of it.
Kawai Chui (2009) draws from Schiffrin's work on discourse coherence focusing on gestures that are not depictive but instead contribute to the structure of the discourse in some way that is not expressed in the co-occurring spoken utterances. Chui discusses examples of utterances from dyadic interactions that did not fully elaborate a speaker’s true intention. In many of these, the co-occurring gesture contributed enough meaning to disambiguate the speech and interactants responded to the spoken/gestured utterances as integrated wholes. Chui also gives examples where speakers did not produce gesture with ambiguous spoken utterances. These instances universally created problem spots (where addressees signaled lack of comprehension) which then triggered the speakers to elaborate through speech and gesture to disambiguate their prior turn. Chui concludes that co-speech gestures “also convey what is intended to be meant….Not only can they carry meaning, they can also play a role in constructing connections in discourse” (662). These data show that speakers create utterances through speech and gesture, that speakers craft these units for addressees, and that addressees process speech and gesture as integrated units.

Repetition of phrases, intonation, syntactic structure, words, and so on is a well-documented feature of discourse that highlights interlocutors’ mutual orientation to one another (Tannen, 1987). Irene Kimbara (2006) analyzes gestural repetition as a feature of interaction that is “similar to such incremental organization of gestures, but only interpersonally” (57). She calls this type of repetition gestural mimicry where an interlocutor “extracts meaning” from another’s gestures and reproduces that meaning in his own gestures. The choral co-production of gestures, she says, temporarily suspends the turn-taking system allowing for a specific interactive goal (“typically affiliative or cooperative action”) to be accomplished (49). Stated
differently, like the repetition of verbally produced utterances, gestural mimicry signals interactants’ attunement to the participation framework. Kimbara also explores co-tellership as an achievement through both speech and gesture that requires the "constant monitoring of others" (52). But, mimicking is also, she says, “no less a social phenomenon. The phenomena of gestural mimicry presuppose an interactional context; it cannot be completely reduced to a speaker's internal psychological functioning" (48-49). Here, then, we see the shift for which Kendon (2008) advocates from viewing gesture as primarily an internal, cognitive phenomenon to a socially regulated one.

To summarize, these works on language in interaction provide evidence that the body is implicated in contributing to elements in discourse beyond propositional content. That is, in addition to conveying visual imagery, depicting action, or iconically standing for real world entities, gesture can also carry out pragmatic functions (like stance taking, footing shifts, cohering discourse) that are typically analyzed in verbal utterances. These latter studies reinforce the claim that gesture plays a central role in language in interaction and they also leave open the original issue at hand in this study, which is the need for a theory that accounts for all of these disparate symbolic phenomena in both modalities.

In the next section, I turn to discuss scholars who see Peirce’s (1955) theory of semiotics as well-suited to accounting for gesture in language (or language in gesture) when situated in interaction. I begin by broadly summarizing Peirce’s theory before discussing contemporary works that apply the theory in analyses of multimodal interactions. I close the chapter with a discussion of how I integrate this particular approach to examining signs with previous works summarized thus far.
2.5.3 Semiotic analysis of interaction and embodied discourses

Before detailing specific aspects of Peirce’s theory (1955; see Parmentier, 1987 for an accessible account) that are relevant to this study, I begin with his definition of a sign as, in essence, anything that stands for something else (Kockelman, 2005:234). Signs include a wide range of phenomena, from words to traffic lights to trees bending in the wind, whose common denominator is not form but that they are interpreted by someone as standing for something else. Unlike most accounts of signs (most notably Saussure’s) where meaning is attributed to a dyadic relationship between a sign and an object (cf. signified and signifier), Peirce presents the relationship as consisting of three parts which he calls the representamen (or sign), object (or what the sign stands for), and interpretant. The interpretant is not a person (as many presume, cf. Taub, 2001:35, as well as Burks, 1949) but rather is a conceptualization or behavior triggered by the relation an interpreter makes between a representamen and its object (Kockelman, 2005:251). Stated differently, an interpretant needs an interpreter but it is not the interpreter.

Likewise, a sign does not exist without a person to make sense of the sign which means that semiosis, as Kockelman (2005) describes it, “involves a relation between two relations” (239). In other words, if a tree falls in Peirce’s forest and no one is there to hear it, the sound is not a sign.

This three-part relation merits more unpacking. In Peirce’s words,

“A sign, or representamen, is something which stands to somebody for something in some respect or capacity. It addresses somebody, that is, creates in the mind of that person an equivalent sign, or perhaps a more developed sign. That sign which it creates I

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14 The meaning of “signs” in this section refers to two different (yet related) things --Peircean signs and ASL signs. For the purposes of this section, I will use italicized signs to refer to Peirce’s use of the word and regular text when referring to actual lexical items of sign language.
call the interpretant of the first sign. The sign stands for something, its object. It stands for that object, not in all respects, but in reference to a sort of idea, which I have sometimes called the ground of the representamen” (1955:99).

So, a sign (or representamen) triggers conceptualization of a more developed sign (the interpretant) which stands for something (its object) based on certain features or elements (the ground) of that sign. The ground is the “significant character” of the sign that triggers the sign’s signification as such (Parmentier, 1987:20). Peirce makes clear that the interpreter need not process all qualities of a sign to glean meaning but instead grasps select features from it. For example, it is not necessary for a person to know the size and shape of a book, the style of font contained within it, the type of paper on which it is printed, and so on in order to see a book and conceptualize it as the conventional object one uses to read (or prop open a door, sit on, burn, etc.). This is reminiscent of Taub’s description of iconicity in her work. Basic qualities of the representamen determine an interpretant (conceptualization, translation, or behavior) that then leads the interpreter to understand the object as connected to the representamen.

What is most compelling about this approach is that it allows for a great deal of flexibility when accounting for the ways in which people create meaning from seemingly irrelevant, inanimate, nonlinguistic objects ad hoc. For example, a stack of paper on a table between two people can go unnoticed one moment only to take on symbolic meaning the next, say, as one participant draws a map then deictically refers to lines on the page in both gesture and speech. This is not unlike real space blends where conceptual entities from mental space become manifest when speakers integrate concepts with objects in real space (Liddell, 2003). What Peirce contributes in addition is that this process occurs iteratively for all symbolic phenomena, even the highly abstract, conventionalized words and syntactic structures.
To account for the different ways *signs* pattern, Peirce further explicates the tripartite relation by providing three sub-components (or *trichotomies*) that highlight a particular aspect of the semiotic relation beginning with the nature of the *sign* itself, then how the *sign* relates to its object, and finally the relationship between the interpretant and *sign*-object relation. The first trichotomy, where Peirce centers on nature of the *sign* itself, defines *qualisigns* as the qualities (or Firsts) that are *signs*, *sinsigns* as the existent objects or events (or Seconds) which Peirce also calls “tokens”, and *legisigns* as the norms or rules (or Thirds) which he also calls “types” (Parmentier, 1987). Peirce accounts for the difference between a word and its specific instantiation in a situated discourse by using the term *replica* which is a special kind of *sinsign* that corresponds to a type.

The second trichotomy consists of Peirce’s definition of icons, indices, and symbols each of which foregrounds the relationship between the *sign* and its *object*. Icons are defined as *signs* that exhibit some quality or formal resemblance with its object. Indices are *signs* that share a physical or existential connection with its object. Symbols are *signs* whose object is linked to it via convention, social rule or law, or habit. Most importantly, these categories are *not* mutually exclusive; they can and most frequently do overlap (a point Taub appears to misconstrue in her claim that Peirce distanced iconicity from language). Peirce envisioned icons, indices, and symbols as a nested hierarchy such that, as Parmentier summarizes, “[e]very index, in order to convey information, must embody an icon….And a symbol must embody an icon and an index, the former to express the information and the latter to indicate the object” (1987:22).

The third trichotomy is especially well-suited to analyzing sign discourse. This trichotomy brings attention to how *signs* are represented in their interpretant, meaning how
interpreters interpret the relation between signs and objects. Peirce again proposes three sub-categories that compose this trichotomy: rhemes are signs that are apprehended as being icons, dicents are signs that are apprehended as being indices, and arguments are signs that are apprehended to be symbols. Essentially, this trichotomy accounts for how we interpret symbols as being icons and indices even when the symbols are not (necessarily) icons or indices. Peirce describes the power of interpretants to “apprehend semiotic grounds as being other than they are” (Parmentier, 1987: 28).

A very basic example of this is the sign OLD in ASL: signers apprehend the sign as iconically referring to an old man’s beard even though the sign is a symbol whose etymology is linked to an altogether different iconic representation. The key notion to grasp in this trichotomy is the agency implicitly involved in the creation of iconicity; that is, iconicity (and indexicality and symbolism) is not a static category that can be slapped like a label on a particular form but rather is achieved by an interpreter through the dynamic process of semiosis.

When viewed from this lens, traditional binary categories like iconicity and arbitrariness (or language and paralanguage) can be reframed as both multidimensional and dynamic. Peirce’s consideration of how propositions can be apprehended to be icons, indices or symbols even though they are not demonstrates, "the possibility for creativity built into semiotic processes" (Parmentier, 1987:29). This creativity is not lost on the data I present here. Peirce’s semiotic provides a mechanism for explaining how signers present highly systemized constructions whose interpretants are apprehended to be iconic and indexical. Additionally, this trichotomy in particular provides an explanation for how interlocutors tailor their utterances to
suit what they perceive to be their addressee’s understanding of their intent (cf. Bell’s (1997) *audience design*).

Peirce’s theory provides a constructive alternative to accounts of ASL that treat iconic signs as destined to become and remain arbitrary. Having to account for how words like *book* become conceptually linked to the class of objects to which the word refers, requires a mediated step since the phonetic realization of *book* in no way resembles the form it represents. As Parmentier says, there is "no particular reason inherent in the nature of the phonic form" that *book* should be related to the class of objects "nor is there any physical connection to transmit the vector of determination from object to sign" (21). But in sign language, this is not always the case. Indeed, a lot of conventionalized signs reflect qualities of their objects. I have already discussed the ways in which signers manipulate conventionalized signs to bring their respective iconic elements to the fore. Peirce's conceptualization of symbols is useful in this case because all symbolic phenomena are mediated through this triadic relation. Thus, it is possible for signs (Peirce’s *symbols*) to foreground different aspects of the triadic relation (when depicting imagery, signs can be produced in such a way as to foreground their Firstness, when not depicting imagery, their Thirdness is foregrounded). The shifts are made manifest at the phonological level (of like and kind that I examine in Chapter 4) but remain consistently available to interlocutors as a part of the language.

To illustrate a basic example of how a Peircean analysis of ASL might work, consider the sign BABY where the arms (or hands) are placed one on top of the other and rock back and forth as if cradling a baby. The placement and rocking movement of the arms are the selected elements of an act one engages in with a baby that triggers our conceptualization of the sign to
mean “baby”. But the sign is also a conventionalized symbol; it can be used to refer to all sorts of infants that one never cradles (for example BABY LION). The sign also functions as an index in that it points to a class of animate objects known as ‘babies’ (it might even literally index a particular baby when uttered by a parent in context). So, the concept of a nested hierarchy is quite useful in describing how iconic signs are multidimensional and can be conventionalized. That is, an icon can also function as an index and/or a symbol simultaneously and a symbol can also exhibit indexicality and iconicity. The nested hierarchy also shows that "symbols are essentially alive. Not in the sense of having breath and locomotion but in the sense of having an evolving, growing, developing nature" (Parmentier, 1987:26). The idea here is that symbolic phenomena are dynamic, ever-changing, and fluid because of us. Humans have both the capacity and the inclination to create, reuse, and repurpose symbolic material around them in endless combinations to make themselves understood.

Several scholars are revisiting Peirce’s semiotics as a means of reconciling the gesture-language dialectic. I turn now to summarize a few representative works by Charles Goodwin, N.J. Enfield, and Jürgen Streeck that specifically apply Peirce’s take on semiotics to analyzing multimodal interaction with discourse analysis and ethnography. These works privilege the contextualization of language and gesture in broader social structures and seek to expand treatments of language to include multimodal symbols.

Goodwin’s earlier works on gesture and eye gaze in spoken interaction (1981, 1986) reveal important corollaries to the regulation of turns we see in sign discourse (e.g., Baker, 1977) and the ways participants reinforce participation through their bodies. In his more recent work (2000, 2003, 2007, 2011), Goodwin proposes a structure of analysis that incorporates
multimodal phenomena in one methodological solution to the problems presented earlier in this chapter. He suggests we examine diverse media including physical articulators but also items in the surround as *semiotic fields* (in his data, speech, manual gesture, torso orientations, eye gaze, and physical artifacts) which “mutually elaborate each other” (2000:1490). Once the analyst identifies the relevant semiotic fields in an exchange, the relationship between these fields can be described as a *contextual configuration* which is “a particular, locally relevant array of semiotic fields that participants demonstrably orient to” (1490) during unfolding talk. He says these “contextual configurations provide a systematic framework for investigating the public visibility of the body as a dynamically unfolding, interactively organized locus for the production and display of meaning and action” (1490).

Pushing further his argument that discourse is embodied, Goodwin (2007) characterizes "the interactive organization of embodied participation" between a father and daughter working on homework as evidence of stance taking evinced through the body (62). The physical index of the daughter’s torso orientation is interpreted by her father as a marker of cooperative stance. Goodwin uses these examples to argue that, at the most fundamental level, interactants have the choice to attend or not attend to an interaction. The fact that people physically orient themselves toward each other is itself an indication that participation frameworks are embodied "accomplishments that must be constructed and sustained through the ongoing work of participants" (62). Goodwin’s analysis of stance taking pushes notions of stance outside the confines of verbally articulated forms to corporal markers articulated through gesture. This presentation of gestured markers of stance promulgates the notion that speech is but one
element in a multimodal array of “structurally different kinds of sign phenomena” (Goodwin 2011:183) characteristic of all languages.

Du Bois (2007) tackles the breadth of forms stance acts can take by presenting a framework for unpacking such utterances. At its most basic, he claims, every stance has a minimum of three components (which are subsumed in the stance triangle): a stancetaker (or subject), an object of stance, and what stance the stancetaker responds to. Calling on Peirce’s notion of indexicality, Du Bois asserts that the meaning of a particular stance must be analyzed as a product of situated discourse. That is, in every stance, the participant (and analyst) must uncover what is indexically missing to correctly interpret the stance (146). Additionally, stances are often a product of two (or more) participants’ contributions: “This kind of co-action, as realized in the context of conversational interaction, is a big part of what it means for linguistic action to be dialogic” (157). Stance acts are inherently pointing to prior talk (even talk that occurred in a different time and place), thus participants are necessarily connecting emergent stances with prior stances and the emergent stances continue to shift and change bringing traces of the prior stances over time (cf. Peirce’s chain of semiosis where the interpretant of a sign-object relation then becomes the object of a new sign).

In an ethnographic study of a community of Lao speakers, Enfield (2009) uses Peircean semiotics to analyze composite utterances, which he defines as "a communicative move that incorporates multiple signs of multiple types" (15), much like Goodwin’s contextual configurations. Enfield explores a variety of gestural phenomena from deictics accompanying demonstratives (like this and that) to depicting gestures that model fishing contraptions to gestures that diagram schematic representations of kin relations. In each of these instantiations,
composite utterances reveal the rich visual/spatial associations gesture affords but also shows that gesture has “representational limits” (120). For example, in one interview, a Lao speaker explains a complex kin relationship using diagrammatic gestures but as he runs out of gesture space, he is forced to amend the virtual diagram and “edit” the gestured construction. Enfield furthers the claim that gesture can be analyzed for linguistic properties (especially in specific utterances he calls “symmetry-dominance” constructions) when we examine gesture in situ. In order to do this, though, we must shift how we view language, not in terms of binary notions “like static versus dynamic, arbitrary versus motivated, or abstract versus concrete” but as “always anchored in the dynamic-motivated-concrete realm of contextualized communicative signs” (2).

Enfield uses the composite utterance as a unit of analysis to illuminate the “asymmetric treatment of the way meaning is attributed to words, on the one hand, and gestures, on the other” (13). He points out that scholars typically analyze verbally uttered words for what they encode (as standing for lexical types) but analyze gestures for what they non-conventionally convey (as standing for "utterance-level tokens of informative intention" (14)). This asymmetry in the way we view these two different sign modes misconstrues how words are actually processed, which is to say not as a binary relation between sign and object but as a relation mediated through a semiotic ground, just like gesture is processed (14). So, in order to accurately define gesture’s relationship to speech, and gesture’s place in language more broadly, Enfield argues we must return to our definition of gesture and language and reframe how we characterize both.
Streeck (1993, 1994) draws from Goffman’s approach to analyzing language in interaction by examining the ways in which speakers tailor gestures to suit addressees. He says, “the visible features (e.g., shapes) of gestures are the result of an organized effort by the parties to use them as visual devices for the making of common sense” (1993: 294). In an analysis of one interaction (1994), he found a speaker shifted the kinds of gestures she used based on whether the listeners were watching. Speakers may not bother to build up complex symbolic constructions unless someone is willing to see them. Thus, how an event will eventually be conceptualized and represented in a moment of face-to-face interaction can depend upon the ways in which the recipient deals with the speaker’s attempts to gesture (257). Streeck shows how gestural utterances are as sensitive to context as spoken ones and, more importantly, must be analyzed as constituents of a larger discourse unit embedded in a socio-cultural context, otherwise we overlook a crucial part of its operation.

Analyses that extricate gesture from discourse in interaction miss how gesture is both shaped by and in response to unfolding talk. Streeck argues, "[w]e understand gestures not only by virtue of their visual forms, but also in terms of their "fit" with a slot within an unfolding action sequence, as well as with the spoken words with which they are coupled” (2011:74). Like Enfield and Goodwin, Streeck sees the integration of semiotic material as multimodal, multidimensional, and ever-present. He analyzes (2011) one conversation between two business associates discussing a marketing plan for a new line of cookies, the men craft utterances using all of the semiotic resources available to them at the moment including speech, gesture, paper and pencil, the cookies and the cookie packages (not to mention the space in which they were located, the table around which they were seated). As one man writes projected prices on a piece
of paper in front of him, he also transforms that act in a “figurative, non-canonical fashion” to suit the talk-in-interaction frame of a negotiation. The man writes down numbers but also performs the act of writing as a symbolic presentation of a negotiated profit. Invoking Peirce, Streeck calls their crafting “a situated hybridization of symbolic and instrumental and/or representational practices” (76) that take both literal and figurative meaning as talk unfolds. Streeck characterizes this hybridity of the seemingly straightforward act of writing on paper and its symbol as a performed negotiation, an “in-between-ness” (76).

This in-between-ness characterizes the data I analyze here. These authors capture the essence of why gesture is so difficult to assess in situated discourse when viewed from a perspective that positions it in binary terms. The juxtaposition of disparate phenomena not only makes sense when we apply the progressivity of semiotics (Peirce, 1955) but presents us with a much larger challenge of reassessing the foundation upon which our understanding of language has been built. Next, I present my own hybridization of approaches to analyzing gesture employed in this study.

2.6 Approach in present study

I adopt Enfield’s (2009) claim that "[s]aying things is not only, or even primarily, a linguistic activity, but a process of constructing moves out of composite resources" (190). The composite resources I focus on here are those expressed through the body which necessarily includes verbally articulated sounds and corporally produced signs. The forms range from conventionalized to non-conventionalized in both modalities (though I do not specifically
address prosody) and include all uses of visible articulators that are interpreted (by the
participants) as meaningful. Duncan (2003) elucidates the problem I tackle here:

"We consider how a sign language utterance may simultaneously incorporate both
morphemic and gestural characteristics and consider whether sign language may also
manifest other types of gestural patterning as well. How we carry out such an inquiry
depends on how we define gesture, even language itself. Defining gesture with respect to
sign language can be especially problematic. A place to begin is by identifying properties
of gesture in spoken language" (260).

Duncan’s argument does not offer a means by which we might begin to formally analyze the
two modalities as integrated into one theory. This has been the approach most studies of gesture
in sign (reviewed earlier in Section 2.3) have taken thus far. The works of Goodwin, Enfield,
and Streeck, provide a specific application of Peircean semiotics that can shift our focus from
identifying properties of gesture in spoken language (as Duncan suggests we do) to analyzing
composite utterances both hearing and deaf people craft in response to similar speech events.
Part of this effort entails stripping certain elements (in both languages) of their linguistic/
paralinguistic monikers (for example, the eyebrow raises that have been ascribed grammatical
status in ASL but not English) and focus instead on their respective semiotic contributions to the
utterances.

Like Yerian’s description of the discursive body, all of the body movements participants
make signal something about their orientation to interaction. The mere act of being co-present
with others is communicative (cf. Goodwin, 2007; Schegloff & Sacks, 2002; Scheflen, 1973). In
addition, people make moves through words or signs, phrases, pitch, volume, intonation, body
position, hand movements, facial expressions, positioning of the arms to communicate. All of
these potentially serve as a resource from which participants glean information about one
another. What is more, these minutiae can be unnoticed, then noticed, then go unnoticed again
moment by moment. The fleeting, ephemeral nature of our attention to these signals is so compelling--they are ever-present and so mundane we do not notice the power they have over how we interact.

Now that we are no longer facing challenges of ASL’s legitimacy, DeMatteo’s argument for considering symbolic phenomena in ASL is worth revisiting. The fixation on iconicity alone, though, is an oversimplification of gesture. Incorporating visual imagery into a broader discussion of language is the first step to take when analyzing what sign and spoken languages do. The next step, I argue, concerns addressing gesture as embodied constructions that contribute to discourse coherence and interactional management.

Interactional sociolinguistics is useful for analyzing gesture because it privileges the larger discourse unit as an essential part of the analysis. Goffman (1979) clearly states, “once one assumes that an encounter will have features of its own—if only an initiation, a termination, and a period marked by neither—then it becomes plain that any cross-sectional perspective, any instantaneous slice, focusing on talking, not a talk, necessarily misses important features” (7). The problem we have seen in analyses of gesture is that isolated forms (e.g., the sign TREE) or utterances (e.g., an utterance describing how Sylvester climbs up a drainpipe) are taken to be indicative of embodied discourse as a whole. Stated differently, we have overlooked key insights into gesture’s operation and function when it is extracted from natural interaction.

Methodologically speaking, gesture in natural interaction is difficult to capture and assess. Goffman (1979) talks about giving credit to the “autonomy” of the talk as a unit of activity of its own right (7). However, he also admits that it is challenging to do a proper analysis of an entire
talk or to label something as autonomous--examining slices of discourse are more convenient to assess.

While the language-imagery dialectic McNeill (1992) proposes is useful in describing the way people produce gesture for one communicative purpose (conveying ideas as part of a narrative retelling), it is certainly not the only (nor main) way people use their bodies to communicate. Works like those of Goodwin, Streeck, and Enfield show that participants do not consider moves in isolation but constantly attend to the entirety of what is going on (or at least the entirety of what they perceive and then filter at the moment, Enfield (2009)). These treatments of gesture demonstrate that interactants craft both verbal and gestural utterances in response to each other and to the interactive event. In addition, these works demonstrate that language in interaction is best analyzed in concert with meaningful behaviors of the body which are affected by but also effect social interaction.

We come to conversations with a wealth of information about ourselves and a flurry of thoughts attempting to assess those with whom we communicate. Our talk becomes a negotiation, not just of meaning, but of who we are, who we say we are and who others say they are (Raymond & Heritage, 2006). Duncan (2003) clearly articulates the risk of not achieving clearer understandings of gesture in language: “From the perspective of research on the gestural dimension of spoken language, we can say that, should it emerge that sign language is in fact devoid of a gestural dimension of patterning, this would constitute evidence of a fundamental and significant difference between languages in the two modalities” (265). It is not the case that no one has tried to resolve the gesture/sign/speech/language divide. It is simply that the issue is so grand and nebulous that it has been difficult to address from any one theoretical affiliation.
The clean lines between gesture and speech and gesture and sign are theoretically easy to draw but fail to adequately describe what hearing and deaf people actually do in interaction.

While iconicity served as a bellwether in initial assessments of gesture in sign, I argue that the myopic focus on it has resulted in significant oversight of a much broader (and more pressing) question which is what does it mean for both spoken and sign language to be *gestural languages*? We need not dismiss gesture from sign for it to be legitimate nor should we discredit gesture’s integration with spoken language as non-linguistic. Instead, as I begin to address here, there exists a connection between sign and speech that can only be uncovered in the body.
3.1 Introduction

This study compares gesture in two multi-party interactions: one group is deaf and uses American Sign Language, the other is hearing and uses spoken English. I employ techniques of discourse analysis and interactional sociolinguistics to analyze the ways in which interactants use their bodies to engage. I compare these two groups as a means of addressing the theoretical divide that is becoming more entrenched as sign researchers begin to reintegrate previously controversial claims of gesture’s relationship to language. I also use the comparison as a means of illuminating similarities across groups and the benefit of applying close analyses of behaviors of the body to spoken discourse data.

To provide some structure to both the hearing and deaf groups, I asked that the participants play the game Guesstures. The game functioned as a control but it also allowed me to see how deaf players intuitively parsed what they deemed to be gesture from sign. The participants in both groups were not instructed to engage in a specific way as part of their encounter other than to play a game. They were not given a set of stimuli to reenact. Rather, they participated in a social gathering not unlike ones they ordinarly have with each other. These participants signal much more than strings of verbs, nouns, and adjectives through their speech and their bodies. They use all potentially symbolic resources at their disposal to convey content about the game they are about to play, about who they are, their affiliations with each
other, and their respective orientations to the task at hand. It is in this rich interactive setting—a setting that resembles interactions people have every day—where I see a more nuanced account of gesture (and language) to be made.

In the spirit of Goffman’s view of language in interaction, I examine multiple “slices” of my data set that represent a variety of speech events structuring each interaction. In so doing, I hope to show that gesture-in-use is multifaceted and not constrained to one end of a spectrum. Additionally, I hope to show that by examining how hearing people actually engage, by identifying the slew of strategies of embodied communication, we arrive at a better understanding of gesture in spoken language and a stronger foundation from which we can compare it to sign language.

In the next section, I describe the game Guesstures, its rules, and its physical setup. I then discuss the two participant groups and how I recruited their participation. I describe my method of collecting the filmed data, digitizing and transcribing it. Finally, I illustrate the quantification and qualification of the data set and the type of analysis I used to address the questions laid out in the first two chapters.

### 3.2 Guesstures

Guesstures consists of a plastic, rectangular game box designed to look like a director’s clapper. The player raises the top portion of the box at the beginning of a turn and when the time has run out, the clapper drops. Four slots line the top of the box in which four cards are placed for each turn-at-play. On the side of the box there is a timer that is turned and audibly ticks. There is also a button that props up the clapper during the length of play. The arm of the clapper is deployed
when the timer starts and at regular intervals (approximately 10-15 seconds) one card in each slot drops out of view. Players are expected to gesture each clue and grab the card of said clue on a correct guess before time runs out.

There are two levels of difficulty for clues, aptly named “Easy” and “Hard”. Players are allowed to pick either level and can mix levels within one turn at play. All cards contain two possible clues for participants to gesture. The Easy cards earn teams 1 point while the Hard cards earn them 2 points. The vast majority of clues are verbs or nouns, however there are some adjectives and adverbs in the collection. Players are allowed to mouth words or sounds as part of their performances as long as it is not the clue. They are not allowed to make noises, though. Finally, they are allowed to use props (e.g., pointing to a stool in the room for the clue “stool”).

3.3 Participant groups

Both groups in my data set were comprised of four friends. The only constraint placed on selecting participants was that the hearing people did not know sign and the deaf people used ASL. Filming took place in one of the participant’s homes to allow for a more natural exchange.

3.3.1 Hearing group

I solicited participation for the hearing group through a “friend of a friend” network. I contacted both signers and non-signers requesting names of a group of four friends who were hearing and did not know ASL. I was referred to an individual who arranged a game night with three of her friends at another of the participants’ homes.
The hearing group consisted of four white women, all in their late thirties to early forties, native English speakers and non-signers (pictured below, Fig. 3.1).

Fig. 3.1: Hearing participant pseudonyms (from left) Mary, Sara, Tori, Lynn

The pseudonyms I use are Mary, Sara, Tori, and Lynn (participants chose different pseudonyms to use during the taping). They are friends with each other but it is not clear that they have spent time together playing games (at the end of the evening, they discuss how much fun the game night was and that they should do it again). They are comfortable enough with each other to talk about topics like dating, personal injuries, politics, and hobbies. But they are also careful enough with each other to avoid insults or on-record face threats.

The group gathered at Sara’s home, where they had all been before. They ate snacks and drank wine. Two of them sat on the couch while the other two sat across the coffee table on the floor or a lounge chair. During a turn, they often stood up to gesture but they did sit down and also walk around the room. Three participants arrived before me. I spent about 20 minutes setting up the cameras, answering questions about the study and explaining the consent forms. The fourth participant arrived about 10 minutes after me. They settled into their game space as I checked the cameras again before I left to sit outside on the patio where I could not hear or see them.
3.3.2 Deaf group

I solicited participation for the deaf group based on my own social network requesting four deaf people who were close friends with each other to host a game night in one of their homes. I specifically avoided controlling for age of acquisition of ASL (although most studies of ASL typically do) but rather framed the request based on kinship between participants and that the participants use ASL in their daily lives.

The composition of the deaf group consisted of two male-female couples, all in their late 30s and early 40s (see picture below, Fig. 3.2).

![Deaf participant pseudonyms (from left) John, Tammy, Jane, Todd](image)

Fig. 3.2: Deaf participant pseudonyms (from left) John, Tammy, Jane, Todd

The pseudonyms I use are John, Tammy, Jane, and Todd (Fig. 3.2). The couples frequently socialize and are comfortable enough with each other to be playful but also serious. All of the participants use ASL predominantly in their homes. One of the four participants acquired ASL as a young teenager, the rest are native signers. None of the participants had played this game before but had played Charades, which they said they enjoyed. This group sat around a circular table in the dining room of one of the couple’s homes. They also drank wine and ate pizza.

A slightly different set-up was required for the deaf group. Because ASL must be seen, I had to orchestrate the setting a bit more than I did with the hearing group. The deaf participants
expected this level of orchestration and appeared quite comfortable with being asked to move slightly to one side so as not to block the view of another participant on the camera. This physical arrangement of interlocutors for maximization of sight lines is in fact a ritualized entry into multi-party interactions in ASL. When a group of signing people gathers, it is understood that all participants will attend to others’ sight lines such that everyone can see throughout the interaction. Even with this cultural understanding, as a sociolinguist, it was difficult for me to take such an active role in organizing where and how the participants sat. I considered it a necessary evil and it did not seem to impact the interaction in a negative way.

After setting up the cameras and reviewing the consent forms, I left the house. Although I played a more active role in setting up the deaf group’s seating arrangements, I did not instruct them to stay in one place. Naturally, they ended up moving during the interaction; one of the participants is very tall and ended up blocking the view of another participant. These moments where data could not be captured are minimal and were worth the loss to get as natural-occurring conversations as possible. Unlike the hearing group, the deaf participants set up one location on the side of the dining table for game play. When each player took a turn, he/she stood up and moved to that side of the table.

The different set-ups may have influenced the groups in significant ways. The deaf group sat around a table in a formal dining room whereas the hearing group was seated in a living room around a coffee table. The deaf group appeared to be more focused on playing the game: the inter-turn conversations were shorter than in the hearing group, they tallied the points after each turn (whereas the hearing group tallied points at the end of each round), and they maintained the same team members throughout the evening.
3.4 Data collection

Each conversation was recorded on two high definition videocameras at 30 frames per second. A higher frame rate is generally preferred for analyzing gesture but because I was most interested in gesture’s role at an interactive level, I compromised the frame rate for the ability to capture longer stretches of discourse and wider frames. For my purposes, it was less important to be able to see the minute movements of the little finger, say, than to see that participant A makes a fist with a raised thumb when she points to participant B.

I imported the films into iMovie 11 and roughly synchronized the two films side by side. I say “roughly” because timing mechanisms of cameras are always slightly off-sync (unless you use very expensive technology for making feature films). I kept a third recording of the interaction where I could see (or hear) all of the participants’ contributions. I continually referred to the third recording while transcribing and analyzing to see what was said when, especially when the timing was important. I then exported the films as .mov or .m4v files to then import into the transcription software, Elan.

The hearing participants were not miked so some of the utterances are not audible. I did not make this decision intentionally. However, the sound is generally very good and the vast majority of the utterances are audible. Interestingly, when I could not decipher what was said, I could always reconstruct the verbal utterance by looking at the co-occurring gesture. The same is true for the visual data of the spoken language group; participants were not confined to one position because I wanted the conversation to be as natural and unconstrained as possible. Because of this, there are moments in both interactions when participants walk off screen, sit
back on the couch out of view of the camera, block each other and so forth. These brief moments when I lose access to data are minimal in comparison to the richness gained by allowing participants to interact in as natural a setting as possible.

3.5 Transcription (and translation), coding, and quantification

Kendon (2008) discusses the impact of transcribing spoken language on our understanding of how it functions. He notes that linguists have capitalized on the analysis of phonology, morphology, and syntax because the languages they studied could be written down:

"In writing a language down, what is transferred to paper is abstracted away from what is actually done within an enacted utterance. Aspects of such an enactment that cannot easily be written down, such as intonation, voice quality, and the like, not to mention kinesics, tend to be disattended and marginalized in formal language descriptions" (357).

The transcription of gesture and sign language presents challenges to the analyst since neither has a written form. In this section, I detail the approach I took to document and analyze these aspects of my data.

I imported both films into Elan, an open source software that allows analysts to transcribe multiple tiers of data that are temporally synced to the video source. The transcript moves from left to right below the video, mimicking the natural unfolding of the interaction. Once data (including the utterances, gestures, speech events, and whatever other coded elements) are transcribed, the analyst can easily search for and isolate moments in the interaction based on the timestamps or on information in the individual tiers. I first broadly transcribed the speech in the spoken conversation. I included very basic prosodic features (rising/falling pitch, marked emphatic stress, vowel lengthening, speed of production) as well as laughter.
I alternated between the side-by-side film and the film that shows all of the participants in the screen when I could not hear the speech as well, making cursory notes about verbal and nonverbal elements of the conversation to return to examine more closely later in the analysis. Next, I examined the gestures used by each participant, again alternating between the side-by-side film and the solo film to see the timing of the gesture on-set and its coordination with the speech. Most descriptions of the gestures were just that, descriptions of the physical forms being produced. I did, however, begin to make use of glosses of ASL signs when the hearing gesturers produced an identical form and meaning, even though no one in this group knew sign language and thus could not be using the ASL sign. Additionally, I used a typology of handshapes (see Appendix 3) to describe the handshapes of gestures. Naturally, my view of the spoken interaction is informed by my knowledge of ASL and similarities across languages were documented.

I began transcribing the ASL data with four tiers for each participant’s signed contribution. Very quickly, I encountered the difficulty of filtering out what was worth transcribing. First, multiple articulators are implicated in communicating meaning: the eyebrows, mouth, head, torso, in addition to the hands and arms. These articulators are just as communicative in spoken language but without speech they become even more salient. Second, naming the gestural forms using ASL glosses (such as WELL, see Chapter 6) was biased, I felt, especially when the hearing group used similar gestures as part of their discourse. These transcription decisions were messy and challenging so I shifted to an even broader approach to documenting the utterances.
Because the contexts of gesturing in both hearing and deaf groups were roughly the same, I was able to establish some basic quantification of the data during game play. I transcribed each of the clues, the gestured utterances and the sequence of the interaction between the teammates during the play. I created a spreadsheet to note the number of passes before a correct guess was (or was not) reached. I identified the level of difficulty (Easy/Hard) for each clue, the length of time for each performance, and the trajectory of the gesturer’s performance (meaning how the gesturer elaborated her gestures during the turn). As I transcribed each performance in both groups, I identified abstract forms and interactive gestures like deictic eye gaze and manual gestures that emerged with some regularity. I added columns to the spreadsheet that captured whether or not a gesturer used an index point toward the partner to signal a correct guess, whether the gestures KEEP GOING or C’MON were used, and (for the deaf group) whether fingerspelling, signing or a combination of the two were used by the guessers.

I coded all of the guesses for both modalities. The hearing group’s gathering lasted one hour and 38 minutes during which 94 turns-at-play were recorded. A handful of clues were performed outside the frame of the video recording (at one point in the filming, a gesturer knocks over one of the cameras as she is performing a clue). These turns are not included in the quantitative analysis. The deaf group gathered for an hour and 18 minutes during which 79 turns-at-play were recorded. During one team’s turn, the guesser is blocked by the participant sitting across from her so for calculations of data concerning the guessers’ contributions, I discard these four clues. For calculations of data concerning the gesturers’ contributions, I include them since I can clearly see the gesturer’s production.
There are clear differences between the two groups that can be seen when quantifying these components of the interaction. For example, out of the deaf groups’ total clues, only five (5) of them were Easy and only ten (10) were not successfully guessed. In contrast, the hearing group used 37 Easy cards out of their 94 turns-at-play and 25 were unsuccessfully guessed. There are also similarities between the groups. Both groups use interactive gestures during their turns, for example, and both use similar strategies to elaborate gestures in response to incorrect guesses. There are also complex gestural phrases and depictive forms that emerge in both groups.

3.6 Discourse Analysis

Approaching interactive data from the bottom up forces the analyst to relate utterances to the broader interaction, make gross comparisons/contrasts between the two, and then work backward to detail evidence for linguistic/gestural phenomena. I combined three approaches in analyzing my data which I explicate in this section.

The first is informed by ethnographic methodologies. Hymes’ theory of Ethnography of Communication (1964) in particular provides analytic units to these interactions. Given the nature of the game nights, I was able to establish direct comparisons between the groups by the different phases of the interactions. I divided both conversations into communicative acts within larger speech events to better isolate distinct phases in each interaction. I then isolated and examined representative instances of each communicative act (e.g., multiple-pass turn-at-play or instruction-giving). These examples were then transcribed in more detail. Speech events (according to Hymes) are isolatable stretches of discourse that adhere to social cultural norms.
Communicative acts are the smaller units of speech that make up speech events. The general structure of both game nights can be schematized accordingly:

<table>
<thead>
<tr>
<th>I. Opening the interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Settling in</td>
</tr>
<tr>
<td>B. Catching up</td>
</tr>
<tr>
<td>C. Attending to food &amp; drink</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. Game play</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Instruction-reading/giving</td>
</tr>
<tr>
<td>B. Setting up game box</td>
</tr>
<tr>
<td>C. Clue selection</td>
</tr>
<tr>
<td>D. Turns-at-play</td>
</tr>
<tr>
<td>E. Post &amp; inter-turn conversation, point tallying</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>III. Closing the interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Wrapping up and reflecting on the game</td>
</tr>
<tr>
<td>B. Closing topics of discussion</td>
</tr>
</tbody>
</table>

Figure 3.3: Schema of speech events during game nights

Participants moved between communicative acts within each speech event, however once a new speech event was initiated (e.g., game play) the participants did not return to the prior speech event (e.g., opening the interaction). Casual conversation and “catching up” did occur after game playing was initiated, however participants were noticeably attuned to an imminent return to the game, shortening those interludes to accommodate the time. Thus, participants can be seen keeping these topics of discussion short, reorienting the discourse back to the game, staying in physical position for initiating a turn-at-play, and so on.

The second analytic approach I employ is influenced by Conversation Analysis or CA (Sacks, Schegloff, & Jefferson, 1974) which emphasizes the emergent nature of conversation and the means by which co-participants mutually make themselves understood. I use CA to examine the ways in which participant utterances are influenced by the immediately previous
contribution. This approach was especially useful when applied to game play where we can see quite clearly how an incorrect guess alters the gesturer’s performance of the clue just as the negotiation of meaning transpires in ordinary conversation.

I also make broader connections across isolated turn sequences that a strict CA approach overlooks. The third approach to analyzing my data was strongly influenced by Schiffrin’s (1987) model of discourse coherence where a discourse is conceived of as parseable into five planes. This approach was useful for me when examining how participants made use of abstract, interactive gestures (like Open Hand Palm Up and Gun Handshape Palm Up) across strings of talk and also how they intertextually referred to gestures across speech events. By expanding my view to look at the entire exchange first, then dividing it into smaller speech events to analyze isolatatable communicative events, I was able to examine how gestures are shaped by their contexts and how participants manipulate these forms and refer to them across broader stretches of discourse.

3.7 Terms

There are several gestural forms that emerge in both groups. I have taken the liberty of assigning glosses that are not standard. The first one, KEEP GOING, consists of the open hands (or sometimes the index fingers) rotating clockwise over each other in the direction of the guesser. The second one, C’MON, consists of one or both bent flat handshape(s) oriented palm up with the fingers bending toward the gesturer multiple times. I also gloss the Open Hand Palm Up gesture, which has been glossed WELL by some (e.g. Wilbur & Petito, 1983; Hoza, 2007, 2011) or 5HSPU (Roush, 1999). This gesture is an interactive gesture that emerges in both
groups mostly outside the turn-at-play. The second form, I call the Gun Handshape Palm Up where the index and thumb are extended from the fist (like the shape of a gun) and the palm is supinated. This form appears to be a variant of (or at least functionally related to) the Open Hand Palm Up gesture.

I established several abbreviations during transcription to streamline the description of gestural forms (See Appendices 1 & 2 transcription conventions and the handshape typology I use). For the ASL signs, I use commonly accepted English glosses written in capital letters. I intentionally avoid using a narrow transcription of the ASL discourse, describing the moments of gestural reenactments without labeling these as depiction verbs (popularly transcribed as “DV;” followed by a description of the depicted action). I made this decision partially because of the fact that I compare the signed data with functionally similar spoken data. If I transcribed the gestural performances in the signed data with linguistic monikers and not do the same with the spoken data, then I would have run the risk of making a technical decision that bleeds into creating a distinct theoretical orientation (i.e., these gestural forms are treated as linguistic in sign but not in speech). On a practical level, a broader transcription is also easier to read and allowed me to focus on the interactive dimension surrounding gesture’s use. I depart from standard transcription conventions in ASL and gloss pronouns with their English equivalents so I use ME, YOU, SHE, and so on, instead of Pro-1, Pro-2, Pro-3.

<table>
<thead>
<tr>
<th>Terms</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supine</td>
<td>Palm facing up</td>
</tr>
<tr>
<td>Prone</td>
<td>Palm facing down</td>
</tr>
<tr>
<td>Terms</td>
<td>Definition</td>
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<tr>
<td>----------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Handshape</td>
<td>Configuration of the hand when engaged in symbolic action</td>
</tr>
<tr>
<td>Mouthing</td>
<td>The movement of the mouth when engaged in symbolic action (like pronouncing “what” without articulating the vocal chords)</td>
</tr>
<tr>
<td>Fingerspelling</td>
<td>The use of the manual alphabet to spell words</td>
</tr>
<tr>
<td>Sign (or gesture) space</td>
<td>The area around the signer (gesturer) wherein signing (gesturing) takes place. Typically constrained to the area just above the head to mid-torso.</td>
</tr>
</tbody>
</table>

### 3.8 Conclusion

Now that I have addressed the issue of gesture in analyses of language in interaction and discussed the methods employed in this study, I turn to explicate findings from my data sets that elucidate many of the issues introduced in the last two chapters. Next, I examine gesture as it emerges during turns-at-play when it takes on the full burden of communication. Through a close analysis of these turns, I show that in fact participants produce gestured utterances like they produce spoken ones--in relation situated interpretations of both local (the prior turn) and global (the entire interaction) talk.
CHAPTER FOUR

WHEN GESTURE SHIFTS: GESTURE DURING TURNS-AT-PLAY

4.1 Introduction

When gesture takes on the full burden of communication, typical patterns emerge. Manual forms become more complex and concatenate in strings of gestures moving the forms closer to language (cf. Goldin-Meadow, et al 1996). In this chapter, I examine what hearing and deaf people do while playing the game Guesstures when gesture takes on the full burden of communication. Through close analysis of the sequence of turns at play, especially focusing on the integration of gesture in a situated context, I present my first claim that even as gesture becomes linguistic (or moves closer to it), the less conventional forms (i.e., gesticulation) remain a part of the communicative repertoire. I also address in this chapter the notion that hearing and deaf people gesture in fundamentally different ways. By examining interactive forms as strategies employed by both groups while navigating through unfolding talk, I show that participants create a rich tapestry of forms in response to engaging in face-to-face interaction. These data show that when we can see each other, we maximize the display of meaningful semiotic resources to make ourselves understood.

This chapter also walks us through what it means to look at gesture from a discourse-analytic lens. I begin by reviewing the type of gesture we expect to see in this game and where that type fits into studies that have looked at gesture when it takes on the full burden of
communication (Section 4.2). I talk about these gestures as primarily iconic idea units and give examples of what these forms look like in the data from the deaf group.

I then present quantified data derived from each group’s guesses and clues (Section 4.3). Evidence of language-specific differences between hearing and deaf groups in terms of speed and accuracy of guesses is discussed. I suggest these quantitative differences point to the disproportionate number of meaningful handshapes that deaf people have access to as part of their linguistic repertoire (cf. Bourdieu’s (1990) *habitus*). These data are consistent with other studies (e.g. Schembri, et al, 2005) that show hand configurations as one of the main distinctions between hearing and deaf gesturers.

I then introduce three types of interactive gestures (the glossed forms KEEP GOING and C’MON, the index point to a guesser, and the deictic use of eye gaze) that emerge during both games. I examine these forms as fully integrated with the execution of performance gestures to demonstrate how participants construct composite utterances using an array of semiotic elements. I focus specifically on the way gesture (and iconic forms) can function in word-like ways (proposing ideas) in response to specific, situated, communicative demands. My analysis of these data furthers my claim that we need not abandon gesture (or iconicity) when accounting for linguistic properties in either modality.

From the quantitative data, I then present a more detailed analysis of the interaction between teammates by considering how the performances unfold on-line, turn-by-turn (Section 4.4). When we consider moves in terms of their local organization as crafted by participants in response to being in interaction, we begin to see similar interactive strategies employed by both hearing and deaf groups. The interactive strategies I focus on are manifest through the use of
interactive gestures, the deictic employment of eye gaze, and the on-line alteration of utterances in response to addressee feedback. By examining the game-centered exchanges as unique instantiations of human interaction, I set up the premise for a discussion of possible universals (cf. Levinson’s (2006) *human interaction engine*) in embodied, interactive patterns in regular discourse.

To this end, I compare the examples from the turns-at-play to instances of casual conversation in each group and illuminate the similarity across speech events in the use of composite utterances (Section 4.5). I show that even when gesture is used in highly depictive and imagistic ways, participants continue to remain attuned to the speaker-addressee relationship and signal this attunement through systematized, embodied moves. These pieces of evidence--where gesture in speech and in sign is used to depict and engage--further my argument for incorporating gesture more formally into the domain of language in interaction.

### 4.2 Gesture on a continuum

The types of gesture we expect to see in the game are pantomime and emblems--those forms whose propositional content is most transparent. I refer to the gestures used to perform clues as *performance gestures*.15 Other forms also emerge during these turns, though, that do not depict clues. These forms orient toward the interaction between teammates and I refer to them as *interactive gestures* (Bavelas, 1994). The distinction between performance and interactive gestures is helpful here because it allows us to see how players situate their performances in the

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15 I acknowledge that choosing the term “performance” in this context might invoke notions of performativity and studies examining discourse in performance settings, connections which I do not wish to make here. I use the term as a means of signaling attention to the interactive purpose these forms serve--the gesturer is performing a clue through gesture as part of the mandate to play the game. I use “performance” more in reference to the frame in which participants are gesturing.
context of the interaction. The shifts between the two types of gesture are visible evidence of
shifts in frames (cf. Tannen & Wallat, 1983). However, I do not wish to make it appear as if
these labels are absolute. Performance gestures are produced in interaction thus they are
inherently interactive; likewise, interactive gestures, in a sense, perform a specific act of
engagement. Demonstrating this intermingling of depictive and pragmatic functions is one way
of illuminating the variety of ways interactants employ movements of the body to accomplish
communicative endeavors.

4.2.1 Background
Kendon (2004) cites the studies of Bloom (1979) and Dufour (1992) that found when speakers
were asked to retell a story without speech, they created gestures that took on language-like
properties. In most cases, subjects invented gestures to name objects observed in scenes and
used a handshape that represented an aspect of the moving object in the movement or action
gesture. Goldin-Meadow, et al (1996) found that when hearing people were asked to recount
vignettes without speech, they established gestures to serve referential functions and combined
them into more complex gesture phrases. At first, gesturers produced highly mimetic forms but
as the narratives progressed, these forms became smaller in size, less iconic, and more sign-like.
These studies show that hearing people are able to quickly generate more complex and even
systematized, gestural structures from no other stimulus besides being asked not to speak.

In other work, Goldin-Meadow (2005, 2007, and Goldin-Meadow, Mylander & Franklin,
2007) has shown that deaf children who do not have exposure to sign language develop basic
linguistic structures from gestural input they receive from non-signing mothers. These children
start to create simple noun-verb phrases by combining deictic points to referents with gestures that depict actions. Polich (2005) presents data from a group of Nicaraguan deaf children, also previously unexposed to sign, who organically developed their own sign language within the span of a decade. These studies are used to show that gesture has the potential to be manipulated in linguistically complex ways (e.g., McNeill, 2005). They also point to the way gesture can shift from one extreme of Kendon’s Continuum to the other.

Kendon’s Continuum (McNeill, 1992) conceptualizes gesture as gradient, from those forms dependent on speech (gesticulation) to those completely independent from speech (sign language). I reproduce the continuum here for clarity.

<table>
<thead>
<tr>
<th>“Kendon’s Continuum” (McNeill, 1992)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gesticulation → Emblem → Pantomime → Sign Language</td>
</tr>
</tbody>
</table>

**Figure 4.1: Continuum of gestural forms from least to most linguistic**

I discussed the implications of placing sign language on a continuum with morpheme-like forms in Chapter 2 and how this presents a theoretical impasse for incorporating gesticulation in sign language. Research on sign languages in the last fifteen years has shifted from earlier claims that sign language is purely segmented and analytic, arguing instead that sign language contains certain types of gesticulation (primarily iconics and deictics).

Gerwing & Bavelas (2004) demonstrate a different interpretation of this shift. They apply the notion of “common ground” from the works of Clark (1992) and Haviland (1977) to the analysis of gesture. Common ground, these authors predicted, influences the form of the gestures in discourse. They found that in situations where participants did not have common
ground, gestures were more informative, complex, and precise than those situations where the participants had common ground. Their study emphasizes that all of the tricks spoken language users apply to new and given information are also in effect in the gestural modality.

Sicoli (2007) addresses the boundary between language and paralanguage in his analysis of voice quality in Zapotec and Spanish linguistic systems. Voice quality is typically treated as an “extra” feature in spoken language but Sicoli discusses it as both gradient and categorical. That is, “[t]he presence of gradient qualities in a sign vehicle should not exclude a sign from linguistic inquiry. Rather than fit the world into the categories provided by a theory (e.g. into either language or paralanguage), we should rather work with a theory of signs that fits the variety of sign types found in speech” (17). Sicoli applies Peirce’s semiotic as the theory that can account for the juxtaposition of gradient and categorical qualities in signs--an approach that is compatible with the analysis of gesture in sign language.

When we speak of gesture and sign (from sign language) using labels like arbitrary or iconic, conventional or non-conventional, we are too coarsely describing the semiotic relations implicated in generating meaning from the physical moves people make (cf. Enfield, 2011:62). Instead, I use Peirce’s notion of a nested hierarchy of signs to explain how deaf gesturers pull apart iconic elements from conventionalized signs to render more “gestural” forms. The nested hierarchy also explains how a signer (like the man narrating the story using VIEUX or John gesturing the clue “sick”) can extract elements that formally resemble the object of a sign and render a more iconic version even though the sign is conventionalized. The indexical and iconic elements of signs, then, remain alive and well as semiotic resources that can be used to foreground different dimensions of those signs.
Enfield (2009) argues that "a key issue in the semiotics of hand gestures, [is] namely the question of whether non-linguistic components of composite utterances show linear segmentation and combinatoric dependencies" (113). Coming from a semiotic perspective, he argues that the way to integrate gesture into the analysis of language is not to analyze gesture as more or less arbitrary than language but instead to view language like we view gesture, which is to say as semiotic and symbolic not static and arbitrary. Enfield argues that a gesture can be structurally related in form and function to a gesture in an adjacent move, that information can be segmented and linearly supplied through gesture (irrespective of the spoken code) and that multiple gestures can occur simultaneously (114). He shows that the sequencing of gestures to elaborate gestured diagrams in space shows that "[g]esture, like language, is forced to linearize when it reaches its representational limits" (182).

In this chapter, I demonstrate turn-by-turn how a speaker crafts utterances (without "language") in response to his/her audience’s response. Enfield (2011) describes this as a “constant in communication” any time “a producer or “sender” is involved, he does not just design a message, but necessarily designs it for a discerning interpreter” (60). It is not always immediately obvious that a speaker is designing her message for her addressee, however in these data, due to the time constraints to quickly reach a correct guess, the attunement is palpable. Schiffrin’s (1990) description of speaker, hearer, and message construction, where the addressee is given as much onus for message construal as the speaker construing it, is especially useful here. Schiffrin shows that message construction is not simply a product of internal cognitive processes but is reliant on an active audience: “the audience finds meaning in
another's behavior and tries to assign possibly multi-leveled interpretations (referential, emotive, social) to whatever information becomes available" (141).

I treat the data in the first part of the chapter as a sort of distilled instantiation of discourse we see in casual conversation. Gesturers craft utterances based on guesser feedback, altering their gestured talk to achieve mutual understanding. I employ tools of Conversation Analysis (CA) in this chapter to focus on the immediate effect of embodied moves on locally contingent clauses. CA is useful for this particular speech event for three reasons. First, the exchanges are limited to two people--there is a clear distinction between a gesturer and guesser--which aligns with the classic dyadic conversations on which CA was originally based (Sacks, et al, 1974). Second, the speech event is clearly bounded--there is an identifiable beginning, middle and end to a turn-at-play, again, consistent with classic CA studies. Third, the interactional goal of the speech event is clear for both parties; teammates are motivated to work together to correctly guess the clues. In these ways, the turns-at-play function as a snapshot of this sender-receiver exchange: a highly concentrated moment of message creation and transmission.

Before considering quantitative measures of turns during the game, I turn next to discuss the ways in which the deaf players negotiated the boundary between gesture and sign. In my data set, the deaf gesturers were more adept at producing elaborate performance gestures while also incorporating elements from sign language into their gestured renditions. We are able to discern quite a bit about the deaf players’ conceptualization of the boundary between gesture and sign by examining how they play this game.
4.2.2 Deaf players’ use of gesture during game play

One immediately perceptible difference between the hearing and deaf groups is the use of eye contact with the guesser. Because the deaf gesturers cannot see a response unless they are looking at the guessers, there is a greater tendency to maintain eye contact (or, stated differently, minimize lack of eye contact) throughout the turn. This pattern of extended eye contact between signer and addressee is not consistent with how deaf people typically converse; addressees maintain eye gaze with speakers but speakers are free to break eye gaze after the start of the turn (Baker, 1977). The extension of eye contact in the game setting is a direct result of the task at hand: the gesturer must quickly move on to the next clue once a guess is made but a deaf gesturer cannot receive a guess without looking at the teammate, thus the pressure to extend eye contact is introduced.

Considering the performance gestures used throughout the game, deaf gesturers incorporate features from sign language but do so by altering some component or components (movement, handshape, orientation, etc.) of a conventionalized sign that foregrounds the iconic relation between the sign and its object. Signers frequently do this in ASL discourse when using constructed action or depicting constructions, for example.

To clarify what this looks like, consider two examples below. The most frequently used approach consisted of incorporating a trace element or elements of a sign while moving the body, head and facial expressions in more depictive ways. For example, in Figure 4.2, one of the players, John, first puts his hands on his waist, leans over and pretends to vomit (this is not a conventionalized sign). His teammate incorrectly guesses “vomit” prompting John to produce

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16 All of the names of the participants in my study are pseudonyms.
the next form in Figure 4.3 where he places his open hands on his forehead and stomach, while tilting his head slightly to his left and making an expression of illness. Compare Figure 4.3 to the illustration of the sign SICK in Figure 4.4.

SICK is a sign in ASL; in Peircean terms the relation between the sign and its object is based on convention. However, we can also identify elements of the sign whose connection with its object is iconic: the placements and orientation of the hands on the head and stomach formally resemble the act of holding these parts of the body where one typically experiences symptoms of illness. The placements are also indexical in that they physically connect the locations where symptoms of illness typically express with the hands placed on them. The configuration of the hands, where the middle finger is slightly bent with the other fingers extended, is a conventional handshape in ASL whose ground is also a combination of a symbolic relation and an iconic relation. The
symbolic relation between the handshape and the semantic notion of touch is evidenced in a family of signs (for example, TOUCH, FEELING, OBSESS (a compound of THINK plus TOUCH EXTENDED OVER TIME), HEART-TOUCHED, FEEL-SORRY-FOR, INTERNET, CONTACT); this handshape is a product of a conventional code. But the handshape also displays a formal resemblance (i.e., an iconic relation) with the action of touching something with one’s finger to engage in that sensory experience. To summarize, the placements and orientation of John’s hands in addition to his facial expression are all elements of the sign SICK. The only alteration he made to the sign was a change in handshape (from a bent middle finger in SICK to the open hand)--a shift that was close enough for his teammate to correctly guess “sick” but also far enough from the sign that no one considered it to be cheating. The sign SICK is composed of smaller parts, and these parts can be analyzed as semiotic elements in their own right. There appears to be some recognition or knowledge of the iconicity inherent in signs that signers draw from when performing gesture (or any kind of depiction in sign discourse).

Another example of how elements of sign are incorporated can be seen in Todd’s performance of “Aquarium”. Unlike the previous example, “Aquarium” does not have a cognate in ASL. Todd incorporates other, conceptually related signs like FISH (Figure 4.4) and WHALE (not pictured) with exaggerated movements as if these creatures were swimming through a large tank. Todd produces what Enfield (2009) calls a “symmetry-dominance construction” where his left hand, which had just finished depicting a large, box-like form, is held in space as a buoy (Liddell, 2003) while his right hand depicts the fish swimming in it.

Incidentally, the sign FEEL (and this handshape) was originally produced with a slightly bent index finger, which is the digit most people associate with touching things (if they are touching with a finger). The shift from index to middle fingers was likely motivated by the centralization that Frishberg (1975) documents.
Figure 4.5: Clue: “Aquarium”

Todd depicts a fish (using the same form as the sign FISH) swimming through a tank

By simply observing these behaviors, what the gesturers do and how their performances are received by the other participants, we can make some hypotheses about what the players determine to be gesture and sign. Clearly, the boundary between the two is blurred since the players legitimately use (per the other players who do not object) elements of signs in their performances. Peirce’s nested hierarchy accounts for this flexibility in forms and the ease with which deaf people can shift forms to formally resemble their objects.

This phenomenon would also account for why the deaf players did not delineate rules before playing the game dictating which forms were permissible and which were not. One might have expected a discussion to have occurred at the front-end of the game, during the instruction-reading portion, for instance, where expectations were set for which signed forms were allowed and which were not. Such a pre-game discussion did not occur, however, as the game unfolded, the participants did engage in a brief interlude where the issue was broached. Tammy prompts the discussion with a self-initiated lament that her last gestured performance of the clue “milk” (Figure 4.6) was too similar to the sign MILK. Here, Tammy faces her partner
(seated off-screen) and depicts the act of milking a cow with both hands. The sign MILK consists of a fist loosely opening and contracting but not drawn down (as is being done here).

**Figure 4.6: Clue: “Milk”, Tammy uses both fists to enact milking a cow**

In response to Tammy’s lament, Todd, a player on the opposing team, brings up the form he used six minutes prior to perform “time” (Figure 4.7).

**Figure 4.7: Clue: “Time” Todd looks at wrist, then at Jane, taps back of wrist several times**

Unlike Tammy’s performance of “milk” which made three changes to the conventional sign, Todd’s only departure from producing the sign TIME was that he glanced at his wrist--a performance of checking the time--which can be seen in the first image. He quickly establishes eye contact with his teammate as he repeatedly taps the back of his wrist.\(^\text{18}\)

\(^{18}\) Note: + refers to a marked repetition of a sign’s movement; # refers to a spelled word using the manual alphabet
**ASL Gloss: MILK, TIME discussion**

1. Tammy: MILK I g-two handed milking STILL NOT… (walks back to her seat)
2. Todd: TIME++. (gets Tammy’s eye contact) #TIME TIME g-gun HSPU
3. Tammy: TIME?
4. Todd: I #DID. I TIME #TIME TIME.
5. Tammy: I THINK THAT g-OHPU GENERAL. [HEARING-
6. Todd: (looks at Jane) ]TIME+ #CLOCK? #TIME #CLOCK? ME TIME?
7. Jane: (nodding, looking at Todd) =#TIME #TIME.
8. Todd: (looks back at Tammy) g-gun HSPU. [Returning Tammy the floor]
9. Tammy: I THINK THAT GENERAL g-OHPUs-wrists rotating-
10. John: (looking at Tammy) GESTURE++
11. Jane: (nodding, looking at Tammy) HEARING PEOPLE TEND-TO TIME g-gun HSPU

**English Translation: MILK, TIME discussion**

1. Tammy: For “milk”, I did this (gestured two handed milking). It’s still not…
2. Todd: (Gets Tammy’s attention) What about the sign TIME? For “Time” gestured as TIME, what about that?
3. Tammy: The sign TIME?
4. Todd: I used that. I used TIME to gesture the clue “Time”.
5. Tammy: I think that’s, how do you say, a general form. [Hearing people-
6. Todd: (Looks at Jane) ]When I gestured TIME was the clue “Clock” or “Time”? “Clock”? … When I gestured TIME?
7. Jane: (nods, looks at Todd) It was “Time”, hmmmm “Time”.
8. Todd: (looks at Tammy) g-gun HSPU [Returns the floor to Tammy]
9. Tammy: I think that form is a general, what’s the word-
10. John: (looks at Tammy) -Gesture, it’s a gesture.
Tammy (line 3) initially does not understand Todd’s reference to TIME--the clue had passed (clearly without notice) six minutes prior. Though he does not so explicitly state, Todd indicates (line 4) by comparison that if he used TIME in his performance (a presumably worse transgression than Tammy’s, as his was nearly identical to the sign’s citation form) then surely her enactment of milking a cow was okay. He checks with his teammate briefly (line 6) to see if his clue was “clock” or “time” just after Tammy starts to point out that TIME is different than her gesture because it is “general” in nature, stating that hearing people use TIME which qualifies it as a gesture. Once Todd and Jane return gaze to Tammy, Jane confirms the point that TIME qualifies as a gesture because hearing people use it.

Although the deaf participants do not overtly establish rules for which manual forms are permissible to use during the game, it is clear that there are a couple of underlying assumptions at work here, one of which is that overlapping gesture/sign forms are permissible if they can be considered “general” gestures (in the literature, these are called emblems). Another assumption we can intuit from this exchange, is that some elements of sign (or even entire signs) can be incorporated into gestural performances so long as there is some sort of embellishment that marks the manual form as performed.

Next, I turn to consider a quantitative comparison of the deaf and hearing groups. In this section, I discuss statistical differences in speed, accuracy and level of difficulty which can be explained, at least in part, by a modality advantage deaf players have.
4.3 Quantitative measures of game playing

The central mechanics behind the game Guesstures is the turn-at-play. In both groups, a turn is initiated when the gesturer selects four cards from the pile and places these cards in the game box. The clue selection process takes some time because the gesturer must select a difficulty level (Easy or Hard) for each card and then pick one of two clues printed on the cards to perform. The process looks essentially the same in both groups: the gesturer withdraws from the group’s discussion (if one is occurring) and focuses on selecting which of the two clues to perform and in what order.\(^{19}\) After the timer is set and started, the gesturer has a limited time to gesture each clue. Recall that the clue cards are sequenced to drop out of view one by one as time passes. Gesturers must perform a clue, attend to her teammate’s response and also monitor her own cards to be sure they have not disappeared.

4.3.1 Statistical overview

There are some quantitative differences between the hearing and deaf groups in terms of the speed, accuracy and level of difficulty during the game. First, I interpret the difference between the two groups’ speed of guessing to be a marker of efficiency in gesture production. Each card has a set time limit during which a gesturer can perform the clue. Nevertheless, there was a difference in speed between both groups (see Table 4.1). The average length of time it took hearing guessers to correctly guess a clue was 6.23 seconds whereas the deaf guessers took on average 5.46 seconds. Another indication of efficiency is the number of guesses it took before teammates reached a successful pass. Here, we see that the deaf group got 63\% of their guesses

\(^{19}\) The only difference being that the deaf gesturer truly disengages from the surrounding conversation once eye gaze is broken, while the hearing gesturer can still peripherally attend (and respond) while reading clues.
by the second pass whereas the hearing group only got 47% correct by the second pass. What these data suggest is that deaf gesturers were more economical, efficient, and effective in their performance gesturing than the hearing gesturers.

**Table 4.1: Overview of quantitative data during game**

<table>
<thead>
<tr>
<th></th>
<th>Hearing Group</th>
<th>Deaf Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Successful passes</td>
<td>73%</td>
<td>89%</td>
</tr>
<tr>
<td></td>
<td>69 (N = 94)</td>
<td>70 (N = 79)</td>
</tr>
<tr>
<td>Easy clues</td>
<td>39%</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>37 (N = 94)</td>
<td>6 (N = 79)</td>
</tr>
<tr>
<td>Hard clues</td>
<td>61%</td>
<td>92%</td>
</tr>
<tr>
<td></td>
<td>57 (N = 94)</td>
<td>73 (N = 79)</td>
</tr>
<tr>
<td>Correct guess by the second pass</td>
<td>47%</td>
<td>63%</td>
</tr>
<tr>
<td></td>
<td>44 (N = 94)</td>
<td>50 (N = 79)</td>
</tr>
<tr>
<td>Average length of a guess</td>
<td>6.23 seconds</td>
<td>5.46 seconds</td>
</tr>
<tr>
<td>Correct guess within 4 seconds</td>
<td>48%</td>
<td>60%</td>
</tr>
</tbody>
</table>

There is also a difference between the two groups’ success rates. Out of 94 turns, the hearing group successfully guessed 69 clues making 73% of their guesses correct. In contrast, out of 79 turns, the deaf group successfully guessed 70 of their clues making 89% of their guesses correct. This difference is especially interesting when we consider the respective levels of difficulty of the two groups’ clues. The hearing group (whose success rate was 73%) gestured Easy clues 39% of the time and Hard clues 61% of the time; the deaf group (whose success rate was 89%) gestured Easy clues only 8% of the time and Hard clues 92% of the time. In other words, the hearing group gestured Easy clues far more frequently and still had a lower success rate than the deaf group.

At first glance, these data show that deaf people are faster and more successful at gesturing harder clues. In light of the conversation between the deaf participants I discussed in the previous section, as well as the examples of the elements of sign the gesturers incorporated
in the performances, these data suggest that the deaf players are accustomed to communicating in this way (cf. Bourdieu’s (1990) *habitus*). This advantage of modality, especially in terms of having a wider range of meaningful handshapes at their disposal during game play, is consistent with Schembri, et al’s (2005) work which shows that hearing gesturers when asked not to speak produced very similar gestures to deaf gesturers except for handshapes; deaf gesturers produced a wider variety of handshapes than the hearing gesturers. Once I began to examine these data more closely, however, especially as they emerged as part of an interaction, I uncovered overlaps in discursive strategies between the groups.

**4.3.2 Interactive gesture data**

A typical turn-at-play involved extensive and elaborate pantomimic performances, however they also included signaling on both teammate’s parts as to the status of their guesses. In single-pass turns, very little gesture outside the performance frame was used. At most, gesturers point or nod to the guesser when the correct guess is made. During multiple-pass turns, though, players tended to include interactive gesture with performance gestures. These interactive forms informed the guessers whether they were close to the correct guess.

In general, three types of interactive gestures emerge in multi-pass turns. First, the emblematic (glossable) forms KEEP GOING and C’MON, which are consistently distributed in both language groups. Second, the index point toward the guesser on nearly correct and correct guesses. This type is used more frequently by the hearing players. Third, deictic eye gaze, where gesturers break eye contact with their teammates and look at the part of the performance gesture they wish to foreground. Because of the location of the cameras as well as the video quality, I
was not able to make quantitative measurements of the use of this feature. I found, however, both groups use deictic eye gaze similarly and will explicate its use in two representative samples in this section.

KEEP GOING and C’MON are commonly used in both groups to encourage a guesser to keep pursuing the same line of guesses. Both gestures are used in the U.S., the most obvious context is by traffic cops directing cars. KEEP GOING is usually formed with a flat handshape (or sometimes an index) where the palm faces the gesturer and the wrists rotate clockwise several times (Figure 4.8). When two hands are used, the hands alternately circle over each other. Frequently, players held a performance gesture with one hand and executed this gesture with the other hand.

![Figure 4.8: KEEP GOING](image)

C’MON serves a similar function as KEEP GOING but its form is different: the fingers of the flat handshape with palm up are bent toward the gesturer several times. One or both hands can be used and, like KEEP GOING, gesturers frequently co-expressed it with a co-occurring performance gesture.
Deaf and hearing groups demonstrated similar distributions of these forms. Neither emerged in single-pass turns unless the gesturer was under a time constraint (i.e., at the end of a sequence of four cards when time was running thin).

**Table 4.2: Percentage of turns players used KEEP GOING and/or C’MON**

<table>
<thead>
<tr>
<th>Use of KEEP GOING and C’MON</th>
<th>Hearing group</th>
<th>Deaf group</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>20%</td>
<td>19%</td>
</tr>
<tr>
<td>(N = 94)</td>
<td>19 (N = 79)</td>
<td></td>
</tr>
</tbody>
</table>

Due to the discourse slots in which KEEP GOING and C’MON emerged (at moments when teammates had not yet reached common ground) we can conclude that the gestures indicate a dynamic information state. Unlike when used by traffic cops in busy intersections, in this context, the forms explicitly mark evaluation of a guesser’s prior contribution and encourage the guesser to continue on the same conceptual track. The interpretation of these gestures’ meanings is contingent upon the verbally uttered previous-mention. When KEEP GOING or C’MON is uttered in tandem with another articulator that is performing a gesture, gesturers signal a three-way orientation to 1) evaluating the accuracy of the teammate’s guesses, 2) performing the
actual clue, and 3) maximizing the communicative potential of their articulators under the constraint of time.

The second interactive gesture I wish to discuss is the index point toward a guesser on a correct guess. When viewed in terms of Bavelas’ (1994) typology of interactive gestures (Table 4.3), the index point functions here as an acknowledgment citing gesture where the gesturer indicates that the addressee’s contribution was seen or heard.

Table 4.3: Definition of two types of citing gestures (adapted from Bavelas, 1994)

<table>
<thead>
<tr>
<th>Type</th>
<th>Function</th>
<th>Paraphrase</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>Signals link to a previous contribution</td>
<td>“As you said earlier”</td>
</tr>
<tr>
<td>Acknowledgment</td>
<td>Marks perception of the previous contribution by the speaker</td>
<td>“I see that you understood me”</td>
</tr>
</tbody>
</table>

Recall, in the spoken group, 69 correct guesses were produced out of 94 clues. Out of those 69 correct guesses, hearing gesturers used an index point to their teammates at the end of the turn 39% of the time (27 times). Nine (9) of these index points (one-third) were in response to “first pass” guesses, while eighteen (18, two-thirds) were multiple-pass guesses. The index point was also used eight (8) times to signal a guesser’s proximity to a correct guess but these were always marked by raised eyebrows, signaling the guesser should keep guessing (Figure 4.10).

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20 In one instance, not counted here, the gesturer indexes her teammate with an Open Hand Palm Up instead of a point.

21 One guess was technically a first pass but is not included in this set because the guesser uttered three guesses in quick succession and the gesturer replied at the end with the index point and a verbal repetition of which of three guesses (the first) was correct. For this reason, I consider the guess to be a multiple pass even though the guesser’s first pass was in fact correct.
I call attention to this particular use of the index point when it emerges at the end of a turn because it serves to both acknowledge the guess \textit{and} mark a shift in frame.

The deaf group, in contrast, only used an index point to signal a correct guess 10\% of the time (7 times out of 72)\textsuperscript{22} and these instances always occurred when guessers took several passes to reach a correct guess (Figure 4.11); deaf gesturers did not use an index point to signal a guesser was close to a correct guess. The vast majority of correct guesses were signaled instead by a short nod and a shift of focus to grabbing the card from the game box.

\textsuperscript{22} Two times, deaf gesturers indexed their teammate with an Open Hand Palm Up.
Figure 4.11: Deaf gesturer’s use of index point toward guesser while performing a clue

It is possible that the deaf group, being accustomed to using nonmanual articulators to express meaning, did not require additional manual signals to inform the guesser that a correct guess was made (or that a shift in the interaction was occurring). In other words, the gesturer’s move to grab the card from the game box was enough information for the deaf guesser to know that her guess was correct. The deaf group was far more likely to use eye gaze (with raised brows and/or head nods/shakes) as a signal that a correct guess was made. Scheflen (1973) discusses a similar phenomenon when interactants, familiar with the structure of the interaction will "shift their addresses and their postural orientations in unison from one focus of activity to the next and thus mark the phases of the program. It is knowledge of the program and these visible shifts that make verbal announcement of next steps unnecessary” (67). During game play, the index point carries very specific meaning but we will see it used more broadly in discourse outside the game later in this chapter.

I turn now to discuss deictic use of eye gaze. Because deaf gesturers have to see their teammates to receive a guess and because gesturers are motivated to both perform clues and perceive guesses, it is logical to conclude that breaks in eye gaze by the gesturer are purposeful
since they effectively prevent the gesturer from seeing a guess (thereby extending the length of
the turn and risking the possibility of running out of time). In point of fact, when deaf gesturers
break eye gaze during the game they do so in interactively meaningful ways. This also happens
in the hearing group (cf., one of the cues for “mobilizing responses”, Stivers & Rossano (2010))
but I first consider an instance in the deaf group as a point of comparison.

In this example, Todd performs the clue “Tattoo”. As he lifts the sleeve of his shirt with
his right arm (the first part of his performance gesture) he breaks eye contact with his teammate
Jane (Figure 4.12) to look at his arm. He keeps his gaze directed at the same spot on his arm
while he taps a shape on it with his right key handshape (Figure 4.13). After tapping his arm a
few times, he looks up at Jane (Figure 4.14) and Jane responds (Figure 4.15) correctly guessing
#TATTOO.
Todd’s gaze from his gesturing hand to Jane signals that he has ended the (potentially first) chunk of gestural information. It also signals that Jane is welcome to provide a guess. Eye gaze at the performed gesture in this scenario is expeditious; it frees up Todd’s hands to continue doing their work and at the same time directs his addressee’s attention to which part of the form relates to the clue. Note, Todd returns gaze to Jane once the semantic content he constructs is complete but he also continues to produce the performance gesture. This aligns nicely with Baker’s (1977) identification of the function of a return to eye contact in sign discourse: the speaker is checking on addressee's decoding, signaling the boundary of an information package, and signaling termination of a turn (223).

The overlap of communicative signals here (i.e., manual gestures with eye gaze) is also a clear demonstration that the speaker is oriented to both conveying information (cf. Schiffrin’s (1987) ideational plane) and also managing his turns with his teammate (exchange plane). To
state it differently, it is not the case that the speaker disengages from interaction to perform a clue then reengages once he is done. Rather, both of these goals overlap (or laminate on top of each other) as the turn unfolds. In the next example, I demonstrate the same use of eye gaze in the spoken language group where participants use the interactive strategies employed by Todd to reach a correct guess.

In Figures 4.16-4.21, Sara performs the clue “Wide” for her teammate Tori (who is seated to the right, off-screen). Sara uses eye gaze to deictically highlight the part of the performance gesture her teammate should focus on. First, Sara gazes at her gesture space and performs a series of movements (Figs. 4.16 & 4.17) depicting the concept “wide” beginning with indicating a narrow space between her index fingers (Figure 4.16). She then transfers her hands to the table in front of her and draws both flat hands away from each other (Figure 4.17). Though this move is not obvious from the screenshot, Sara then slides both hands across the table in Lynn’s direction. As Sara draws her hands back to her gesturing space, she re-establishes eye contact with Tori (Figure 4.18).
Like the previous example from the signed data, Sara looks at her teammate right at the boundary in an information package and also when she is inviting her to propose a guess. Unlike in the deaf group, it is not physiologically necessary for Sara to see Tori to hear her guess. Nevertheless, Sara shifts eye gaze intentionally and meaningfully as an overt interactive signal. Sara’s felicitous use of this signal and the striking similarity to its use in the previous example shows that the behavior is not unique to sign discourse.

Tori does not respond to Sara’s solicitation for a guess, which prompts Sara to elaborate her performance further (Figures 4.19-4.21). She begins by lifting her hands (Figure 4.19), raising her eyebrows (marking the co-occurring manual gesture) and quickly breaking eye contact to gaze at the space between her hands (Figure 4.20). Still looking at her hands, Sara brings them close together then draws them apart, again depicting the concept “wide”. Notice, Sara’s head tilts back as her arms extend apart and her brows remain raised marking the topic.
While holding her hands in that position, Sara returns eye contact to Tori (Figure 4.21) who says, “Wide?” and Sara points to Tori signaling the guess was correct (not pictured).

To summarize, unlike the deaf group, the hearing players are able to break eye gaze for extended periods of time without threat of missing a guess but they, too, use eye gaze to deictically highlight elements of gesture when elaborating conceptual content, especially content produced through a series of forms. Eye gaze also helps to segment content by cluing
the addressee into which chunks of displayed actions conceptually belong together. Finally, eye
gaze is used to solicit a guess (i.e., as a turn-giving signal). Once these gestured ideas/concepts
are built in space, both hearing and deaf gesturers typically return their gaze to the guesser. And
even though the hearing players are not biologically required to see their guessers, a return to
eye contact serves as a natural signal to solicit a response and/or to initiate a turn.

In this section, I examined three gestures (both manual and nonmanual) which mark the
dynamic interaction of guessing during turns-at-play. First, I discussed the emblematic forms,
KEEP GOING and C’MON, which are used similarly in both groups to encourage a guessing
teammate to follow a certain conceptual track of guesses. Second, I examined the use of the
gesturer’s indexical point toward the guesser when a correct guess was made. I talked about this
form as akin to Bavelas’ (1994) citing gesture. This form is far more frequently used by the
hearing players than the deaf players in my data set. Finally, I examined the gesturer’s use of
eye gaze when it serves as a deictic reference to the performance gesture(s) and as a guess-
soliciting (or turn-giving) signal.

While some of these interactive gestures emerge in single-pass turns, they are far more
likely to emerge in multiple-pass turns. What this says to me is that when more give and take is
required between players to reach common ground, participants are naturally triggered to
produce gestures that mark orientation to and help construct the interaction. Stated differently,
interaction primes participants to mark their own orientations to it and this orientation is made
manifest through embodied moves. Players make use of both performance and interactive
gestures in a variety of ways--often simultaneously--in hopes of successfully reaching a correct
guess. I turn next to analyze these turns-at-play as discourse units in their own right, setting the stage for the analysis of examples from conversational data in Section 4.5.

4.4 Discourse analysis of turns-at-play

By applying discourse analysis to these data, I emphasize that the local contingency of gestural clauses demonstrates that these utterances operate like spoken utterances situated in a broader context. In other words, it is not simply the case that a gesturer produces propositional content; he also monitors his teammate’s uptake, responds and alters gestured propositions to suit his teammate’s guesses. The process is identical to what transpires in ordinary conversation (cf. Enfield, 2011) only in this setting, we are able to see hearing interactants exclusively using their bodies to accomplish this interactive work.

4.4.1 Hearing group: “Deodorant” example

In the first example, Tori performs the clue “Deodorant” for her teammate Mary who takes seven passes before stating the correct guess. Tori produces a series of both performative and interactive gestures as a means of communicating her teammate’s proximity to the clue. Recall, the player’s task is three-fold: she must perform the clue, monitor & manage her teammate’s responses, and remain attuned to the position of the cards in the game box. Tori signals orientations to each of these tasks in embodied signals throughout the course of her turn. As we will see, Tori combines and constructs interactive and performative gestures fluidly and instantaneously in response to Mary’s guesses.

Tori begins by lifting her left arm and pointing to her armpit while looking at Mary (Fig. 4.22). Mary’s body position is straight and she is sitting on the edge of the couch, both hands
are on her knees in an “at the ready” position (Scheflen, 1973; Baker, 1977) with eyes fixed on Tori.

Figure 4.22: Clue: “Deodorant”; Gesturer: Tori, Guesser: Mary

Mary guesses “armpit” in response to this first gesture. Tori then gestures KEEP GOING with her left hand while continuing to point to her armpit with her right hand (Fig. 4.23) signaling Mary is on the right track.

Figure 4.23: First use of KEEP GOING (left hand) with performance gesture (right hand)

Recall, the use of KEEP GOING is a marker of acknowledgement that the gesturer received information and at the same time an evaluation of that information’s accuracy. In this instance, Tori upholds two of her three tasks simultaneously by gesturing KEEP GOING while continuing to index her armpit with her right hand. The simultaneity is efficient because it maximizes the amount of information she can give to the guesser in a short amount of time.
Assuming she is on the right track, Mary guesses “axillary” which prompts Tori to change her gesture again. Tori quickly switches arms and also switches handshapes of the underarm hand from an index to a fist (Fig. 4.24), which more accurately depicts the act of applying deodorant. It is clear from this shift that Tori has incorporated the feedback she received from Mary whose previous two guesses (“armpit” and “axillary”) were both consistent with indexing the armpit. By changing her gesture to a fist that strokes her underarm, Tori shows a recognition that pointing lacked specificity and that more symbolic detail was required.

![Figure 4.24: Second performance gesture](image)

Still laughing from Mary’s “axillary” guess, Tori begins to drop her hands and shake her head “no” in response to Mary’s third guess “shaving” (Fig. 4.25). We see here three simultaneous markers of orientations to different aspects of the exchange: first, laughter (while Tori repeats “axillary”) that was instigated by a past-previous guess; second, a head shake “no” in response to the previous guess “shaving”; and third, a visible shift from the original gesture Tori performed to a new form she produces (Fig. 4.26) in hopes of honing in on a correct guess.
Figure 4.25: Tori shakes head ‘no’, shortly suspends performance

In the next form (Fig. 4.26), Tori pinches her nose with her left hand and quickly waves the air in front of her nose with her right hand. Mary responds by guessing “stinky”. This moment is five seconds and four passes into the guess, what will be the halfway point of the turn and a relatively long time for a clue not to have been guessed. We can assume that both teammates are feeling pressure to complete the turn and will see evidence of this pressure in the movements that emerge in the remainder of the exchange.

Figure 4.26: Tori performs a second form; Mary raises both elbows

In Figure 4.27, Tori resurrects the second performance gesture we first saw in Figure 4.24 where she raises her arm and depicts the act of applying deodorant. Mary quickly utters a list “stinky, smelly, odor” with a falling pitch at the end of each word.
By this point, seven seconds into the turn, the pressure to get a correct guess is at its highest. Tori has produced a series of gestural forms, and each time Mary narrows in closer to a different conceptual element of the clue (armpit > axillary > shaving > stinky > smelly > odor). After “odor” is uttered, Tori again shakes her head “no” (Fig. 4.28) and temporarily suspends the performance gesture to produce the interactive form C’MON with both hands.

Tori tilts her chin up, raises her eyebrows and continues to gesture C’MON with both hands (Fig. 4.29). Here, we see Tori’s orientation to two of her three tasks: she is informing her teammate of the proximity of her guess to the clue and is signaling her awareness of the possibility that time will run out.

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23 These nonmanual signals—the raised brows and tilted chin—are commonly used in ASL to mark a request (most typically a request for specific information) and have also been identified as occurring with co-speech gesture (Scheflen, 1973: 49).
The intensity of the pressure to elicit the correct response is even more evident in Figure 4.30 where Tori frantically bends her fingers back and forth while leaning her torso far outside her gesture space, as if trying to pull a correct answer from her teammate. Her chin is still raised as are her eyebrows. By leaning forward in this way and using C’MON, Tori establishes the space between the two teammates as exclusively interactive; this space between the women is expressly used to communicate interaction-related information.

Mary has no additional guesses at this point; she utters “uhh” while maintaining eye contact. Tori leans back into her performance space and clenches her teeth while nodding her head once and maintaining raised brows and a tilted chin, not allowing Mary to give up on the progress they have made so far.
In a last ditch effort, Tori returns to her second performance gesture (Fig. 4.31) with her left arm raised and her right hand sweeping her underarm. This instance looks different than the first time it was executed (Fig. 4.24) when the time pressure was less acute. Tori has still laminated the “solicitation of response” markers on her head and face but she has bent her torso outside her original neutral position which is a visual trace of her recent attempt to drag out a correct guess. Notice, too, that Tori’s left arm is no longer fully extended over her head but is now bent almost across her face. The change in production of this element of the gesture mimics one of Frishberg’s (1974) evolutionary tendencies discussed in the beginning of this chapter where extended movements and locations outside the periphery of a signer’s body become centralized in a signing (or in this case, gesturing) space. Finally, Mary guesses “Deodorant! Deodorant!” to which Tori replies by pointing her left index at Mary (Fig. 4.32).

Figure 4.31: Tori returns to original form with chin tilted up & brows raise

Figure 4.32: Mary correctly guesses “deodorant”; Tori begins to index to Mary (left hand)
Tori’s indexical point toward Mary at the end of the turn signals a dual orientation: back to the correct guess that was just made and forward to the transition that is about to occur (either to the next clue or to the end of the turn). Like the C’MON and KEEP GOING gestures, this form’s function is solely oriented toward the communicative interaction of the game. It behaves like a citing gesture in ordinary conversations, marking that the previous contribution is “on track” with whatever the gesturer is evaluating and at the same time initiating a transition by the gesturer.

The ten-second exchange technically falls short of a successful turn because the card drops out of reach just as Tori moves to retrieve it. But it contains the same pattern we will see in the deaf group (as well as in ordinary conversation). To review what has been discussed thus far, both gesturer and guesser use their bodies in response to the communicative demands before them. The gesturer (Tori) feels her way through the dynamic information state with her teammate by altering her gestures in accordance with what she interprets to be Mary’s understanding of the forms. The gesturer integrates interactive gestures KEEP GOING and C’MON to signal proximity to a correct response. Finally, an on-line shift in a gestural form occurs when Tori first performs a widely-extended arm-raise which then contracts into a smaller gesture space on the second mention. Even without speech, then, participants are wont to shift between gestures that exclusively perform a clue and gestures that are specifically oriented to the communicative component of the exchange.

One key aspect of this exchange is that this gesturer is capable of and inclined to simultaneously perform a clue through depictive forms while also interacting with her teammate through less iconic gestures of the hands, face, and body. We might view this intermingling of
gestural forms as in part driven by the pressure of time. In addition to being efficient, though, it is also simply physically feasible to do so. From this perspective, we see an analogous scenario to co-speech gesture but without the speech--a sort of co-gesture gesture, if it can be so stated. Evidence of this phenomenon (the simultaneous execution of multiple articulators) in a group of hearing interactants is important because it validates (through its similarity to) the moves that occur in signed discourse that are not labeled or considered to be gesture.

As concerns the shift from non-linguistic to linguistic, I reach a different conclusion than those who view the evolution as unidirectional (like Goldin-Meadow, et al, 1996). Shifts like these are better explained as motivated by (or indicative of) situated interpretations of speaker/addressee intent. The shortened movements resulting in simplification of referential forms occur in a context where the first (more elaborated) mention is already established in the discourse, making subsequent mentions freer to be less elaborate and yet still carry as much referential meaning (a point argued by Gerwing & Bavelas, 2004). The only reason Tori contracts the size/movement of the “Deodorant” gesture is that she previously expanded it. All of the semiotic information conveyed in the first form is still salient in the interactional space such that the abbreviated second mention is enough for Mary to glean meaning from it. We see the flexibility of this feature in Tori’s first inclination which was to simply point to her armpit, but when she saw Mary was misled by the move, Tori produced more elaborate forms (not less). So, the evolution of gestured forms from the highly iconic to highly arbitrary cannot be fully explained as a response to linguistic pressures to become more arbitrary but rather is due to interactive pressures where communicating clearly and efficiently in response to locally situated turns is paramount.
Next, I turn to examine what a similar turn-at-play looks like in the deaf group where the guesser and gesturer move through multiple attempts at successfully guessing a clue. Similar interactive moves like the ones we have seen in this example are evident in the sign discourse and bring to light the discursive resources available for participants of both modalities.

4.4.2 Deaf group: “Aquarium” example

The turn-at-play I examine here is Todd’s performance of “Aquarium” for his teammate Jane. Unlike many of the other clues the deaf group gestures, “Aquarium” does not have a single lexical equivalent in ASL, so the gesturer does not have to avoid using a specific sign. This turn is relatively long for the deaf group; it takes roughly nine seconds to complete with six passes before Jane reaches a correct guess. Todd adjusts his gestures in response to the guesses Jane provides just as the partners in the hearing group did. Several interactive gestures emerge in this sequence executing different functions simultaneously. Like in the previous example, Todd is oriented to three tasks: performing his clue, monitoring his teammate’s feedback (which in this case requires his eye gaze to be directed at her), and trying to execute the turn within the time limit.

In Figure 4.33, we see Todd’s first move performing “Aquarium” where he depicts the sides of a large, box-like form in space with his torso slightly bent over gesture space. During the first and second part of this performed gesture (Fig. 4.34), Todd’s eye gaze is directed at his gesture space deictically highlighting where Jane’s focus of attention should be. Jane’s brows are raised and her right elbow rests on the table with her hand in an “at the ready” position in front of her shoulder.
As soon as Todd completes the second part of the first performed gesture (Fig. 4.34), he quickly shifts eye gaze to Jane while depicting a fish swimming through space (Fig. 4.35). This form resembles the sign FISH in its handshape and orientation except that here it moves length-wise across space to show a fish swimming.
Todd does not drop his left arm out of gesture space but rather holds its position thus maintaining activation of the previously depicted form (cf. Liddell’s buoy (2003), Enfield’s symmetry-dominance construction (2009)). The returned eye gaze to Jane signals that Todd has completed the first conceptual chunk of gestures and that he has reached a transition point for Jane to guess. The temporarily frozen form of Todd’s body is also a signal that he leaves open the possibility of elaborating his gesture based on the type of feedback he gets from his teammate.

Jane fingerspells her first guess, #FISH, while she has eye contact with Todd (Fig. 4.36), clearly in response to the FISH sign Todd used. Todd quickly shifts his eye gaze to gesture space again and illustrates the height of the sides of the box form (Fig. 4.37) foregrounding that it is not the animal but the location in which the animal is housed that is relevant.

While Todd elaborates the box form (Fig. 4.37), Jane wiggles her fingers (a move that is typically used by deaf people when searching for a word or planning a turn, roughly equivalent to the filler “um” in English). As he depicts the height of the front and back sides of the box, he returns his gaze to Jane.
As soon as Todd returns his gaze, Jane produces her second guess #TANK (Fig. 4.38) and is met with a blank stare.

She then quickly wiggles her fingers and begins to produce a third guess #FISH TANK? at which point Todd responds with the interactive gesture KEEP GOING (Fig. 4.39). By this time, five seconds have passed and Jane has produced three guesses. Pressure is mounting, and Todd’s execution of KEEP GOING emerges when his performance gestures have not elicited the correct response.

In Figure 4.39, we see Todd gesturing KEEP GOING while leaning his torso slightly to his right. This move is the first to distinguish between a performance space and an interactive space (much like Tori’s lean forward toward her teammate) in the previous example. Todd also
lowers his brows and quickly nods his head one time, which are two nonmanual signals directed at his teammate’s guess.

![Figure 4.39: Todd nods & lowers brows, gestures KEEP GOING](image)

Notice, Todd never completely abandons performing the clue in order to engage in this interactive work. His torso, while leaning to the right in the interactive space, is also slightly bent forward with his elbows extended away from his body; these also signal an “at the ready” position that allow him to quickly return to gesturing. He layers, then, through the different articulators, orientations to two different tasks (one to perform the gesture and another to monitor his teammate’s proximity to the clue) simultaneously.

Jane holds the final handshape of #FISH TANK (the manual letter K) followed by the sign QUESTION during which time Todd shakes his head “no” and shifts back to full gestural performance, resurrecting the box shape first depicted in Figure 4.33. By now, the team is six seconds into their turn and keenly aware time will soon run out. In response to Jane’s departure off-course (#FISH > #TANK > #FISH TANK > #BOX), Todd ups the gestural ante and produces a highly exaggerated form of a large box (Fig. 4.40). His fingers spread, his arms fully extend outside gesture space, and his torso is completely straightened. He pulls his lips tightly closed and maintains eye contact with Jane thus signaling her opportunity (or mandate by this point) to continue to guess.
Todd continues to depict a large form with different moves of his arms high in gesture space (Fig. 4.41). I call attention to the reincarnation of the first gesture (Fig. 4.33 & 4.34) in this exaggerated form (Fig. 4.41) because it contradicts the evolutionary trajectory Frishberg’s (1974) analysis predicts. As Jane proffers more incorrect guesses, Todd adjusts his first, more efficient choices (BOX + FISH) with less efficient but more gestural, iconic forms until common ground is established. Jane repeats her earlier guess #TANK prompting Todd to add another element to his performance.

In Figure 4.42, Todd begins to depict another aquatic animal diving into the aquarium. The selection of this handshape is drawn from the conventional sign WHALE. He purses his lips and undulates the modified horned handshape, palm down, across gesture space. Todd abandoned the use of the FISH form clearly in an attempt to more closely display the concept of an
aquarium by emphasizing its capacity to hold an animal as large as a whale. These additions are enough for Jane to produce the correct guess #AQUARIUM.

![Figure 4.42: Todd performs new gesture with handshape of the sign WHALE](image)

By the time Jane signs M, Todd produces his second manual interactive gesture, the index point at Jane (Fig. 4.43), one of only seven in these data, signaling a correct guess.

![Figure 4.43: Todd indexes in Jane’s direction ending turn](image)

Like we saw in the spoken data, these teammates are attuned to each other and to their communicative tasks as evidenced through moves of their bodies. While the goal of this exchange is specific (to perform a clue and reach a correct guess) the pattern the teammates exhibit (the give and take of statements and responses, the overall orientation to interactive work) is not unlike what we see in ordinary conversation.

In this example, I focused on how the response of an addressee directly impacts the speaker’s message production. Todd begins by selecting two basic elements of the concept
“Aquarium” (LARGE-BOX and FISH-SWIMMING). When Jane responds with her first three guesses, Todd realizes he needs to tailor his original choices (by increasing the size of the box, adding a form of a larger aquatic animal) which in fact become more elaborate and gestural, not less. The interactive dance is not merely a display of performative gestures, though. It also involves a complex array of nonmanual and manual signals specifically designed to inform the guesser of her utterances’ proximity to a correct answer. These provide evidence of Enfield’s (2009) claim that utterances are composed of multimodal signals that mutually elaborate each other (see also Goodwin, 2007). The articulators contribute different elements of semiotic meaning that the addressee interprets as a meaningful whole (cf. Chui, 2009). The “binding problem” Levinson (2006) discusses is imperceptible here, as addressees quickly incorporate and respond to the speaker’s cues. It is not the case that the guessers are perplexed by what they see. Rather, they are in tune with and attuned to their teammates’ intentions.

So, we see in this example, Todd uses KEEP GOING but he also shifts his torso outside the gesture space into a second interactive space, and uses head movements and eye gaze to signal which part of his gesture Jane should attend to. All of this interactive work occurs in concert with the depictive behaviors of the body that simultaneously execute the work of performing the clue. This orientation to multiple tasks is exactly what occurs in ordinary conversations (cf. Schiffrin, 1987; Levinson, 2006): two or more people engage in a give-and-take, crafting their contributions and responses based on their interlocutors, the goals of the exchange plane and the information state.

The deaf group has an advantage in game play since their linguistic code already has signs (like FISH, WHALE, and BOX) that evince icons in the interpretant (Peirce, 1955). The
interactive patterns, though, which the deaf players employ resemble the interactive work that
the hearing group engages in: both use eye gaze to point and to regulate turn-taking, both shift
their torsos in space to index performing and interacting modes, and both use emblematic forms
(like KEEP GOING) to clue guessers into their degree of accuracy. What I find most compelling
about these data is the facility with which gesturers in both modalities shift between multiple
orientations—and even maintain two or three orientations simultaneously. It is clear that these
resources are a part of their natural communication system simply amplified. We would expect
this type of execution by a signing deaf group, but to see the same sort of behaviors in a non-
signing, hearing group is somewhat surprising. It provides additional evidence for possible
universals in how interaction is structured (cf. Levinson, 2006).

Now that we have a better sense of the kind of work participants engage in during this
very specific instance of interaction, I turn next to examine these patterns in ordinary discourse,
applying the same close analysis of embodied moves, this time with the addition of speech and
sign streams. I call attention to the ways in which the composite utterances shift in response to a
change in interactional goal. Most importantly, the strategies summarized above do not
disappear when the linguistic code is introduced. That is, hearing and deaf participants do not
cast off the communicative strategies they used during game play that employ symbolic moves
of the body. The linguistic signs become interwoven with the other semiotic fields to
accomplish the interactive work. When the communicative potential of the signs are exhausted
or inadequate, other meaningful signs are implemented in their stead.

4.5 Discourse analysis of turns outside of the game
In the following section, I examine two slices of discourse from each group to show how composite utterances are also pervasive outside the game frame. I reproduce the transcript of the speech and then refer to the gestural forms associated with each utterance before discussing how these conversational moves simulate the sort of moves we see occurring during a turn-at-play. The participants continue to integrate gestural forms that carry propositional content with those that signal orientation to other planes of discourse.

4.5.1 Hearing group: “There’s this game…”

Immediately prior to this stretch of talk, Sara mentions that multiple player games are more fun because multiple guessers can proffer more guesses. Lynn takes up this topic and introduces a specific game, whose name she cannot remember, that requires multiple players to play. The game is a fairly difficult concept to convey. A player has to read aloud a written sentence that is segmented in phonetically marked places rendering the phrase incomprehensible when uttered. To explain this game to the women, Lynn engages in interactive work (to successfully maintain a long enough turn to do so), depictive work (to clearly articulate the game), and also work to make her talk relevant to her audience. The other women, especially Mary and Sara, interject in ways that impact Lynn’s construction of subsequent utterances. Lynn juggles multiple orientations to different planes of discourse while constructing her turn: she attends to her interlocutors’s respective positions (participation framework), she makes her contribution relevant to prior talk (information state), she implements turn-taking devices (exchange structure), and she conveys propositional content (ideational plane). All of these moves are made manifest through her speech and the behaviors of her body, which I closely examine next.
The exchange occurs right after Tori has performed a clue unsuccessfully. Tori jokes that having more guessers would make the teams more successful. Sara picks up on the topic, shifting it slightly, “I think it is fun to have more than one person guessing” at which point Lynn tries to describe a game she has played before that is best played with multiple players, “There is another team-another game that's very similar to this that involves words um-”. Lynn describes this word-based game as “so much fun” but she cannot think of its name. She leans to her right and points to Sara (Fig. 4.44).

![Figure 4.44: Citing gesture, right Gun Handshape Palm Up with “There is”](image)

The indexical point does not co-occur with a verbal pronominal reference to Sara. Rather, it serves as a gestural reference to Sara’s previous claim (that games with more players are more fun). Lynn signals through this point that her utterance is connected to Sara’s; in essence, it ratifies (Goffman, 1981) Sara as Lynn’s addressee by gesturally conveying, “I have something to add to your point, Sara…”. The gesture also secures Lynn’s claim to the floor as her body (including her arms) become animated in space. Lynn goes on to say, “another team-another game that’s very similar to this” during which she presents her right hand as an Open Hand Palm Up and her left hand as an open hand with palm to the side (Fig. 4.45). I go into detail about the Open Hand Palm Up form in Chapter 6 detailing its function and interactive meaning.
For brevity’s sake, the Open Hand Palm Up gesture metaphorically presents the new discourse topic in gesture space.

**Figure 4.45: Delivery gesture on “another game that’s very similar to this”**

Lynn still cannot remember the name of the game, which leads her to cover her eyes as she thinks of the word (not pictured). Although this is not a turn-at-play, we can already see some clear parallels to the way the guessers and gesturers worked together to reach common ground. In this case, the group does not know the name of this game and Lynn cannot remember it.

Lynn’s moves help to describe the game which prompts Mary (at least) to guess its name, “Is it Outburst?” Lynn replies “Uh n:o: that's-I haven't played that one” while pointing at Mary with both index fingers (Fig. 4.46). The points to Mary perform the same function as during a turn-at-play when teammates are correct or when they are close to a correct guess.

**Figure 4.46: Lynn points to Mary with both hands “I haven’t played that one”**
Lynn continues, “Oh what's it called? It's um-” while lifting both Open Hand Palm Up forms and wiggling the fingers while she gazes up and to the left (Fig. 4.47).

Figure 4.47: Wiggles fingers, “Oh what’s it called?”

Already, there is a perceptible difference in the gestures during game play. Up until this point, Lynn’s gestures have been almost entirely interactive (citing Sara and Mary’s talk, presenting a topic in space, searching for a word) while her speech has conveyed most of the propositional content. When speech is introduced to the discourse domain, the body does not stop its communicative work, it simply assumes different dimensions to conduct different functions. In other words, interactive demands shift and in response the body’s communicative values change. As Lynn begins to describe the game, though, her gestures convey more propositional content as she establishes different depictive forms in space, uses eye gaze to engage her interlocutors and call attention to salient gesture forms, and juggle orientations to different planes of discourse.

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### “There’s this game and I’ll think of the name of it-” Hearing group

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Lynn points to Sara again as she says “I’ll think of it because” (Fig. 4.48). As we saw in the last example, there was an open floor during which all of the participants jostled for turns. Sara initiated this shift in topic and Lynn’s index point (several turns later) refers back to Sara’s talk. In effect, Lynn visually targets Sara’s prior talk as subject for her own upcoming turn.
What is equally potent in this point is Lynn’s co-occurring raised brows, which in this instance do not signal a Yes/No question but instead mark the introduction of new information. She then initiates a contrast between a small and large version of the game in both her speech (“I have it? In the small form?) and gesture (two claw handshapes, palms facing each other depicting the size of the cards) (Fig. 4.49 A & B). Notice, Lynn never verbalizes that the game is played with cards or that its small form can fit in Lynn’s hands. We reach that conclusion by interpreting this gesture-speech pair as one unit (cf. Chui, 2009; also McNeill, 1992, 2005) facilitated in part by Lynn’s eye gaze at her gesturing hands. When she depicts the big form, she shifts eye contact back to her interlocutor Sara. This is the same pattern we saw at work in both groups during game play.

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24 Just as new information is marked in ASL.
Until this point, Lynn has verbally addressed the group (e.g., she doesn’t whisper to one person) but she visually directs her attention to Sara. We see evidence of this in the initial index toward Sara and then Lynn’s use of eye gaze (first at Sara then at her gesture space then back at Sara). Lynn expands her audience visually in the next utterance when she shifts her torso to her right, establishes eye contact with Tori and draws her open hands with palms down away from each other (Fig. 4.50). As she utters “like six?” she pauses very slightly which Sara uses as an entry point to add “I think it’s nice to have-” (line 5).

**Figure 4.50: Lynn to Tori “It would be better with like six?”**

In response, Lynn shifts her torso back to face Sara and begins to articulate the gesture in Figure 4.51 A&B (where her hands reach far outside her gesture space and draw apart) while saying “‘Cause.. Then we can have:”.

**Figure 4.51A: Lynn and Sara overlap talk**  **B: Lynn depicts row of players**
As Lynn draws her hands apart to depict a row of players, Sara does not stop talking so Lynn does. Notice, though, that while Lynn stops talking *verbally*, she continues to complete the second part of this gesture phrase (Fig. 4.52) depicting a second row of people. We know this depicting construction represents a row of people because Lynn first produces it with “it would be better with. Like six?” (Fig. 4.50, Line 4). In Figure 4.52, we see Sara displaying the gestured number ‘two’ while completing her utterance “I think it’s nice to have two people guessing at least.”

![Figure 4.52: Sara: “-two people guessing at least-”](image)

What this example reveals is that one speaker (Lynn) co-expresses gesture with speech when it is interactively or communicatively expeditious to do so. When it becomes unproductive (i.e., when her interlocutor (Sara) talks at the same time) the speech drops out but the gesture continues. Gesture researchers have thoroughly documented when gesture shortly preempts speech (Streeck, 2009 calls these gestures “pre-s”) but rarely is gesture thought of in terms of a *post*-speech phenomenon.

Lynn points to Sara (Fig. 4.53) and says “Yea” (Line 6) in response to Sara’s most recent comment. Again, the deictic gesture does not co-occur with a pronominal referent but rather points to Sara’s discourse, citing her talk. The move also maintains Lynn’s presence in the
interactive space; she could simply sit back and stop talking after Sara’s interjection. Through this index point, Lynn continues to position herself in an active role visibly and through speech.

**Figure 4.53: “-like on your team” Lynn: “Yea.”**

I have discussed a variety of forms and functions thus far and it is worth taking a moment to review them before examining the remainder of this conversation. First, I have examined interactive gestures that regulate turn-taking, cite prior talk, and deliver content to interlocutors. The influx of interactive gestures during this conversation is a marker of the amount of interactional work required during multi-party conversations, especially when a speaker attempts an extended claim to the floor. Second, I discussed how this speaker employs eye gaze to deictically refer to a gestured form and to connect with her addressees. Third, I indicated the use of a depictive gesture phrase that initially co-occurs with speech but then “assumes full burden” when speech becomes ineffective. In the remainder of this conversation, Lynn shifts to describe the game in more detail. I call attention to the array of depictive forms that emerge as a result. Some of these forms are repeated throughout the talk contributing a unifying thread to the discourse (cf. McNeill’s (2005) *catchment*). Lynn continues to layer multimodal resources to signal the various orientations to different planes of discourse.

In Figure 4.54, we see Lynn resurrect the same size-depicting gesture we first saw in Figure 4.49 only this time, Lynn is looking at her interlocutors (first Mary and Sara, then Tori)
instead of her hands. Lynn again does not mention the cards, she only says “but what they do is they take a phrase”. Because she first used the card-depicting gesture then the word “phrase” her interlocutors see and hear, “But what they do is they take A SMALL OBJECT THAT CAN BE HELD IN YOUR HAND on which is written a phrase”.  

Figure 4.54: “But what they do is they take- A phrase”

This composite utterance includes several semiotic signs which mutually elaborate each other. These signs convey orientations to different discourse planes. First, Lynn’s gaze at Sara and Mary, then Tori, marks her orientation to the participation framework and exchange structure, showing that she is crafting her talk for these three women. Second, her verbal utterance introduces a third party “they” who performs the action “take a phrase”. The use of “but” also marks her own shift from trying to think of the name of the game to describing it. The lengthening of the vowel in “phrase” calls attention to the manual form co-occurring with it. And lastly, the gesture phrase first demonstrates the size of the cards and then metaphorically presents the written phrase as a concept with the open hands placed in space. The integration of these semiotic fields is seamless. There is no evidence from her interlocutors of trouble spots or miscomprehension.

25 Gestured glosses are capitalized, inferred meaning is in italics, verbally uttered phrases in regular font.
Lynn further elaborates the concept, “And then they spell it out..” (Fig. 4.55) where her left hand (a buoy from the card gesture in Fig. 4.54) is held in space and the right hand mimics writing out the phrase on the card. Again, Lynn has not verbally uttered that phrases are written out on cards. If we only listen to the speech, any number of game set-ups is possible. The manual gesture provides crucial information that we would otherwise miss if we did not consider it in conjunction with the speech.

Figure 4.55: “And then they Spell it out..”

Lynn then transitions to explain that the game is played by placing stress on syllables in words that are typically unstressed, thus making the phrase incomprehensible when the player reads it aloud. She displays the concept (of placing stress on a sequence of syllables) by touching both flat hands to each other and bouncing them to her right three times (Fig. 4.56). She also draws out the vowel in “breaks” to accommodate the more complex gesture that accompanies it. The vowel lengthening also conveniently mirrors the lengthened movement of her hands as they move apart in a horizontal line.
I call attention to the amount of descriptive (not to mention interactive) work Lynn has had to execute to reach this point in the talk. By now, she has established the existence of a card, that the card has a phrase on it, and that the phrase is broken up in phonetically unexpected places. Depicting the concept requires Lynn to develop a complex set of manual pictures which is made even more challenging because she cannot remember the game’s name. Her addressees endow Lynn with her claim to the floor (that is made even more explicit when Sara challenges it). Lynn also gauges her audience’s knowledge of the game, otherwise she would not bother elaborately depicting this game had they already known what she was talking about (cf. Streeck, 1994).

Lynn continues to build upon the description turning next to explain what players do with the cards. To accomplish this, she engages in a very common phenomenon in signed discourse called constructed action (Fig. 4.57) where she depicts an action in a scene as if participating in it. She first breaks eye contact and shifts her torso to her left, she looks at her hands and resurrects the card-holding handshape with her left hand (from Fig. 4.55). Her right hand assumes a key handshape and is drawn across the depicted card while she says “So you have to say these words.” When she utters “say”, she returns her eye gaze to Sara, thus ending the constructed action. The shift in interactive goals (from jostling for turns to expounding on an idea in a single floor) has dramatically impacted the types of gestures that emerge.
Figures 4.57: “So you have to. say these words.”

What is equally compelling is that this constructed action (in addition to the other depictive work) seems to keep her audience’s attention. Streeck (2002) characterizes this type of embodied discourse strategy, “a dramaturgy--a skillfully timed sequencing of reanimated words and reanimated actions that will keep the audience engrossed” (591). In this example, the feature accomplishes a joint attention by Lynn’s audience.

In the next utterance, Lynn explains that you say the words “and string ‘em together-”.

Lynn produces a similar gesture to the one she used when she said “spell it out” and “so you have to say these words” only this time, her handshape has changed from a key (which mimicked the act of writing) to a ring handshape which more closely aligns with the concept “string ‘em together” (Fig. 4.58). 26

Figures 4.58: “And string ‘em together and put different emphasis”

26 Incidentally, this handshape is used in ASL for the signs SENTENCE, CHAIN, LINK, CONNECT--signs who share at their semantic core concepts of linking or stringing entities together.
Lynn again produces this “string ‘em together” gesture when she repeats the utterance “words that are spelled out on this page” (Fig. 4.59 A&B). This is the fifth time she has invoked the imagery of words spelled out on a page, each time slightly altering the form of the gesture. The shifts do not indicate loss of iconicity but rather are dependent upon the level of detail she wishes (or needs) to convey.

Figure 4.59A: “On the words         B: “that are spelled out. On this”

By the time she has completed her elaborate depiction of this game, she reaches out her Open Hand Palm Up toward Sara and says “And come up with the answer” (Fig. 4.60 A&B). The return of the Open Hand Palm Up to Sara completes the discursive cycle from which Lynn originally started.

Figure 4.60A: “And come up with         B: “the answer.”

Like all of the other instances of deixis in this exchange, the Open Hand Palm Up does not refer to Sara but to the topic Sara originally introduced. This final deictic is also the longest distance
marker of prior talk which might account for why it is produced with an open hand as opposed to a point (for a more complete discussion of this gestural form, see Chapter 6). Though Lynn constructs this discourse for the group, she is also clearly tailoring it to suit Sara’s original point that games with multiple players are more fun.

To summarize, composite utterances emerge regardless of the nature of the speech event. Though the gestural modality does not carry full burden here, it is still burdened with expressing meaning. Like during game play, Lynn continues to respond to her audience through her talk and embodied moves. For instance, both Mary’s and Sara’s contributions are received by Lynn with an indexical point, the same citing gesture we saw operating in the turns-at-play when guessers were close to or had secured a correct guess. These gestural forms honor the collaborative exchange the group established thus far, specifically marking the interactional work Lynn is doing to incorporate Sara’s prior talk into her impending turns. The gestures also simultaneously serve to secure Lynn’s floor. Once Lynn finally gains the floor at least in part by acknowledging Sara’s past mention (with her Open Hand Palm Up directed at Sara) and manipulating Sara’s proposition to fit her own, she is finally able to elaborately depict the game.

Lynn depicts several concepts. For example, when she introduces multiple players on two teams, she leans her torso far ahead into her gesture space and draws her open hands with palms down apart depicting a team sitting in a row. She gestures two small crescent handshapes, palms facing each other, while uttering “But what they do is” as she begins to explain the multi-player game she has in mind (Fig. 4.54, reproduced below). The manual gesture she produces is semantically inconsistent with her speech but contributes meaning her speech does not express.
Figure 4.54: “But what they do is they take a SMALL OBJECT THAT CAN BE HELD IN YOUR HAND on which is written a phrase-”

It is only clear through the gesture that this game comes with cards. By glossing the utterance: “But what they do is they take a SMALL OBJECT THAT CAN BE HELD IN YOUR HAND on which is written a phrase”, we can make more explicit the integration of the various semiotic fields. Lynn also uses torso shifts to segment her discourse, setting up distinct spaces while using these gestural phrases. She creates a depicted game space in front of her and slightly to her left where she returns to utter statements about the actual playing of the game. She establishes a game depiction space in front of her and moving to the right where she utters statements that describe the actual format of the game. Lynn also makes use of an interactive space on the periphery of her gesture space (both in front and to the right) where she either leans her torso or reaches out her hands when connecting with her interlocutors (such as pointing to Sara).

In subsequent moves, Lynn works to clearly describe the game so the group can understand why it is a good game to play with multiple players (i.e., to make her talk relevant cf. Grice’s (1975) cooperative maxim). We have seen Lynn use manual forms in conjunction with movements of her torso in space to highlight (or foreground) certain concepts (cf. Clark & Gerrig’s (1990) selectivity principle of depictions). Lynn also uses eye gaze to perform this task.
Additionally, I would like to note the depictive gestures that convey propositional content function similarly to words (and signs): they are repeated, elaborated upon, and referred to throughout the discourse as one of many meaningful resources used during interaction. Lynn first introduces the small-card shape then repeats the same form six lines later, holds one of the hands in space (as a buoy) on which she elaborates more specific information about the card (writing out the phrase).

Like during a turn-at-play, Lynn juggles orientations to several different tasks. She is attuned to her role as a member of the group as evidenced by her moves to make sure others are heard and also works to make her utterances relevant to the interaction. She uses speech and gesture, sometimes in a complementary relationship and sometimes exclusive of each other, to convey these concepts. We see her move between an interactive space, a depictive space, and a space where she is trying to recall a word, in response to the demands that this particular discourse imposes on her.

The integration of a variety of semiotic resources is seamless and ubiquitous in this exchange. By applying discourse analysis to a larger interactive discourse unit, we are able to see how participants’ gestural moves contribute to the five planes of discourse. In the spoken data, we are able to easily distinguish between moves of the body and speech. Previous analyses would treat this discernible separation as analogous to a gesture-language distinction. However, as we compare these data to the example in the next group, I ask the reader to consider the ways in which such a superficial distinction influences how we label what is linguistic and what is not.
4.5.2 Deaf Group: “EAT MEAT...MORE STRONG?”

I turn now to address gesture’s role in interaction in the deaf group. Recall the challenge discussed earlier when analyzing sign, we are faced with the opposite dilemma in the spoken discourse because we cannot easily separate gesture from the linguistic code. Having just seen gesture as it emerges in the spoken interaction, I point to the similarities between groups in the strategies employed by interactants to accomplish their interactive work. Attention should be paid especially to the torso shifts Todd makes as he segments his discourse. Also notice the use of more depictive constructions as Todd works to establish common ground with his addressee and how he uses eye gaze to both highlight ideas and engage.

I again apply Schiffrin’s model to identify the moves and their contributions to discourse coherence. In this context, when we are less certain of the boundary between gesture and language, we can be more certain of the integration of these features into the linguistic code (or at the very least, in the communicative repertoire of deaf people).

This exchange occurs between Todd and John before the game has started (Tammy is present but reading the instructions and therefore not party to the two men’s talk). The addressee (John) shifts between a supportive listener and an engaged interlocutor, further validating Todd’s role as the primary speaker. Similar interactive behaviors that were at work during turns-at-play are also present here: participants shift their torsos in meaningful ways, they use eye gaze to manage turn-taking, and they elaborately depict when interactively necessary.

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<thead>
<tr>
<th>“EAT MEAT … MORE STRONG?” Deaf group</th>
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The topic of eating a vegetarian diet started earlier as the group discussed what kind of pizza they had to eat. Todd informed John that he quit eating meat for a period of time to see if he could control physical pains he was having in his upper body. Their conversation was
interrupted as I left the house, so John reinitiates the topic here asking Todd: “EAT MEAT.. UM..MORE STRONG?” “When you eat meat..um..that makes you stronger?” (Fig. 4.60).

Notice both John’s and Todd’s eyebrows are raised even though only John is producing an utterance. Raised brows in this utterance signals a topicalized clause, marking introduction of new information into the discourse (just as we saw in the spoken data when Lynn raised her brows while pointing to Sara). In this example, Todd is mirroring John’s raised brows (a subject I discuss at length in Chapter 6) which essentially signals Todd’s complete attention to and attunement with John’s talk. What is initially important in John’s request for clarification is that he stalls his signing between MEAT and MORE by tilting his head back and wiggling his fingers (Fig. 4.62). Todd interprets this to be a turn-relevance point (Sacks, et al, 1974) and he breaks eye contact with John to sign THOUGHT ME++.27

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27 I use the gloss “THOUGHT” even though technically the sign is THINK because Todd mouths “aw” with the sign which is interpreted to mean THOUGHT.
By the time Todd looks up at John when he signs ME (Fig. 4.63), Todd realizes that John has continued to sign: John’s mouth is beginning to articulate “more” and his hands are in position to sign MORE.

Notice how Todd’s chin is lowered and his torso is leaning back while he signs ME. He repeats the contact of the index finger to his chest several times (which is a marked instance of the pronoun) as he realizes and processes the end of John’s utterance. After John signs MORE, Todd stops signing and suspends his hands in space (Fig. 4.64).
Todd’s torso is shifted back to neutral position and his facial expression signals that he is receiving a message from his interlocutor. By this time, John has only asked “EAT MEAT...MORE” but we do not know more of what. John then signs STRONG which is where Todd begins to shake his head “no” in response (Fig. 4.65).

The course Todd originally started, which began with “THOUGHT ME”, shifts here as he assesses John’s understanding of his prior talk. The dynamic shifts in the information state here are visibly embodied in Todd’s pauses and in his reply: he says “NO+ LESS” (Fig. 4.66).
Figure 4.66: John stops signing, Todd signs LESS

Though it isn’t obvious in this screenshot, after Todd signs LESS, John then leans his head far back and nods one time repeating LESS with his left hand, essentially saying, “Oh, less, okay”. But John’s confirmation of Todd’s prior talk in fact signals a trouble spot for Todd, not in something that John has said but in Todd’s own understanding of what John must have meant by “EAT MEAT...MORE STRONG?”. Todd appears to have registered what John meant by the question, at which point he waves his hand, shakes his head, and mouths “no”.

John misinterpreted Todd’s original point which was that he quit eating meat to control pain in his body not to improve strength. Initially, Todd complied with the contingency clause John presented in his Yes/No question by uttering the easiest response that can negate, “NO+ LESS”. But Todd did not mean that he felt less strong when he did not eat meat but that he felt less pain. In an effort to signal collaboration and joint construction of this talk (by attending to John, by stopping his turn when he realized John was not finished asking a question, by replying to John in a relevant manner), Todd mistakenly produces a message (NO+ LESS) that was inaccurate and which he then has to repair. So, we see Todd simultaneously 1) being a cooperative interlocutor (participation framework), 2) attending to his interlocutor’s understanding (information state), 3) respecting the turn-taking system (exchange structure),
and 4) managing propositional content (ideational plane). Todd’s quick, almost knee-jerk response to John’s question displays what Levinson (2006) describes as a strong bias for a preferred response: “that the organization of conversation biases actions in the preferred direction—the system is set up so that it is just easier to comply with requests or accept invitations than to decline them!” (48). Though Todd’s response is technically a negation of John’s proposition, evidence of cooperation is seen in Todd’s use of LESS—the semantic opposite of John’s MORE—as opposed to NO followed by “you misunderstood what I meant”. It takes Todd some time to register that John’s question signaled miscomprehension of Todd’s point, but once Todd realizes, he must do more work to repair than simply negate.

Todd’s next move elaborates his point with the conditional statement “#WHEN HAVE MEAT, #STIFF…” “When I eat meat, I feel stiff” (Fig. 4.67) which prefaces a depiction of the stiffness he feels in his upper body (Fig. 4.68).

Figure 4.67: Todd’s torso and gaze shifts to right, raises brows to set up conditional phrase

Conditional statements like this one, where the signer shifts his torso outside neutral position to signal the when-clause component of the utterance, take more time to construct than the simple statement like his first reply “NO LESS”. Todd depicts the stiffness he feels in his upper body by putting both claw handshapes on his chest and clenching his teeth (Fig. 4.68). He maintains
eye contact with John throughout the next utterance “claws on chest #SORE claws on chest
SAME ME FEEL SAME” “I feel sore in my chest which is typical, I always feel that way [when
I eat meat]”.

Figure 4.68: Todd returns gaze to John, depicts soreness in upper body

What I would like to draw attention to here is that Todd’s initial response to John’s
question, his first impulse, was the quickest, most efficient choice he could make while still
satisfying the demand to engage in cooperative discourse28 (the most efficient response if he
were not being cooperative would be to simply say “no”). Once Todd realizes that his first
response was inaccurate because it did not comply with what Todd really meant, he then takes
the less efficient choice which involves the more elaborate use of space and engaging in
depiction. It is the interaction, then, that triggers the signer to shift along a continuum of forms.
DeMatteo (1977) asserted that, “the signer’s first response--his first intuition, if you will--is to
choose the more visually based representation choosing descriptive signs or mimic signs in
order to create an icon in the sign space” (121). In this sequence, we see the more iconic,
depictive constructions emerging subsequent to the less depictive constructions and only in
response to a shift in the information state. In other words, the signer here takes the more

28 Interestingly, this is in direct contrast to DeMatteo’s (1977) claim reviewed in Chapter 2.
economical route first but when that approach does not work, he elaborates his utterance with more depiction. This provides evidence for the claim that the movement along the theoretical continuum (from iconicity to arbitrariness) is fluid--that, in fact, signers move both directions depending on the situated context in which the signs are produced.

Performing a clue and describing a game in regular conversation both require some degree of elaboration and collaboration. Schiffrin’s (1999) description of message construction as contingent on an active audience is especially salient in these examples. This exchange in particular makes explicit the visible markers that signal orientation toward the interaction between Todd and John. For example, the hesitations between utterances, mirrored nonmanual markers (see also Chapter 6), contingent responses that trigger self-initiated repairs provide a thread to Todd’s discourse as it is situated in relationship with John at this moment in time. Todd reacts to John’s responses, altering his discourse to accommodate his own dynamic understanding of John’s knowledge. What is traditionally considered linguistic output provides information as well but we gain more evidence of this element of interaction when we conceive of these utterances as capitalizing on multiple semiotic fields, features like movement in space, torso shifts, facial expressions, use of constructed action, and so on.

In sign, this type of analysis (one that parses and closely analyzes the various articulators for meaning) is customary. What is novel in its presentation here is the similarity in interactive patterns across modality. When Todd moves his torso, the sign linguist automatically views the move to be intentional, meaningful, and contributing to the linguistic structure of the discourse because we are analyzing sign language. When John or Todd raises and lowers his brows, we immediately ascribe those movements grammatical status. My argument in examining these
discourses from each language side by side is to show that both groups, hearing and deaf, signal engagement and create discourse coherence through their bodies in highly similar ways.

4.6 Conclusion

In this chapter, I examined the complex array of gestural forms that emerge during turns-at-play. I discussed the differences between the two groups in the speed of guess and level of difficulty and implications these may have in terms of modality-dependent facility of gesture production. I then discussed the distribution of three interactive gestures that emerge as a part of the turn-at-play and discussed implications these data have in terms of modality-independent patterns of interaction. By grounding my analysis in situated contexts, I emphasized the degree to which participants’ gestures mark orientation to the participation framework and exchange structure. I contextualized the quantitative findings in examples from both groups to demonstrate the breadth of gesture use beyond conveying propositional content. I showed that gesturers in fact engage in a great deal of interactive work to depict their clues; they shift along the gesture continuum, not because the modality imposes that constraint on them, but because they seek to reach common ground. The interactive gestures were the first piece of evidence I used to discuss the speaker-hearer relationship.

We expect to see performative gestures that depict clues, however the interactive work that teammates simultaneously execute triggers the emergence of gestural forms geared exclusively toward the interaction not the performance of the clue. Both groups make use of manual and nonmanual forms to connect with respective teammates. Both groups also intermix interactive and performative gestures--sometimes iteratively, sometimes simultaneously--during
turns. The facility with which these players, both hearing and deaf, shift between performance and interactive spaces suggests that these body behaviors (though amplified during game play) are part of their communicative repertoire. We assume this to be the case for the deaf players since their linguistic modality is gestural. What is surprising is the level of comfort the hearing players have executing the same interactive dance through their bodies.

I compared these turns-at-play to slices of discourse outside the game frame where one interlocutor took an extended turn at talk. Extended turns allow speakers more time to elaborate concepts (in the hearing group, a discussion of multi-player games; in the deaf group, a discussion of muscle aches after eating meat). But the speakers did not craft their utterances in a vacuum or, as Goodwin (2011) notes, does not occur “within the splendid isolation of a private world” (185). They specifically tailored their talk to their recipients’ as talk unfolded. Both speakers adjust their talk (through composite utterances) to make their points clearer and more relevant to their addressees and the ongoing talk.

None of this is particularly shocking when these discourses are viewed in isolation, recipient design (Bell, 1997) is a common strategy in both spoken and signed discourse. When viewed side-by-side, however, and in light of the performance strings examined first, we begin to see structural patterns and communicative strategies that exist across modality that emerge in the gesture domain. The progressivity of semiosis accounts for the players’ abilities to generate symbolic meaning ad hoc and to work through emerging understanding of their teammates’ comprehension (cf. Peirce’s second trichotomy). As was stated earlier, the use of interactive gestures during highly iconic performances advances the argument for broadening our analysis of gesture in both modalities as a product of interaction. It becomes clear that manual forms
coexist with a variety of multimodal signals all of which are needed to construct coherent discourse.

Creating a unified theory of gesture does not mean that I am arguing ASL and English are analogous in every way. It does mean, however, that when we shift analytic focus to functional executions of gesture *in context* we see a clearer picture of how participants create composite utterances to convey meaning and navigate interaction through their bodies, which ultimately points to possible interactive universals (cf. Levinson, 2006). In sum, this chapter illustrated that by shifting our view of gesture to its situated environment we gain a better understanding of the way hearing and deaf people use a variety of communicative resources, along the gesture continuum, to achieve interactional goals. In the next chapter, I examine discourse slices where interactants engage in task-based discussions. These moments highlight the management of turns as well as the ways participants take stances through their bodies.
5.1 Introduction

In Chapter 4, I demonstrated how analyzing interaction as constructed by and through an array of semiotic fields (Goodwin, 2007) allows us to move beyond categorical labels of gesture that isolate it from language proper. I showed that even when the gestural modality takes on the full burden of communication, interactants continue to construct composite utterances to elaborate all planes of discourse. I discussed the implications of applying theories that conceptualize sign language as occupying one extreme on said continuum as ultimately discounting the possibility that abstract forms that structure spoken discourse exist in sign as well.

In this chapter, I further my claim that the body is fully implicated in both spoken and sign languages by analyzing gestural moves as a discursive feature. Like spoken utterances (cf. Schiffrin, 1987), gesture is also used to accomplish a variety of semantic and pragmatic goals, often at the same time. The variety of forms and functions gesture embodies cannot be captured in a bilinear continuum because gesture (like all Peircean signs) is multidimensional. I have already examined the exchange between teammates where gesture is performed during the game frame and introduced how participants intermix gesture with speech/sign while they casually converse. In this chapter, I turn to task-oriented interactions like reviewing pseudonyms, taking pizza orders, and setting up the game where Schiffrin’s (1987) model of discourse coherence is especially useful in accounting for gesture when it functions pragmatically. To orient the reader
to the planes of discourse specifically implicated in these data, I briefly review the notions of frame, footing, positioning and stance in Section 5.2 and then examine discourses from the groups that exhibit embodied markers of the exchange plane and participation framework (Section 5.3). Both examples in this section contain rapid turn-taking that is primarily managed by a single participant. I discuss what this turn management means in terms of stance creation and also discourse coherence. In Section 5.4, I closely examine the integration of the action structure, participation framework, and exchange plane through gesture as participants orient themselves to the game box and the instructions. This type of situated activity has been examined as a locus for the coordination of multimodal resources to convey meaning and also mark stances (e.g., Goodwin, 2011, 2002, 2007; Yerian, 2000). I call attention to the way physical materials influence articulation of nonverbal moves and how participants incorporate these materials as semiotic resources in their own right.

The conversations during game setup are distinct from the conversations before game setup based on a physical orientation to the game playing space. Participants continue to signal orientations to each other and to prior talk, while also managing the practical task of manipulating physical materials like the game box, cards, and instructions that triggers different types of body behaviors that would otherwise not emerge. For example, participants extend their gestures outside gesture space to produce manual forms on or near the game box. The physical materials also serve as symbolic resources that convey meaning in their own right. I examine here how participants craft composite utterances to demonstrate, describe (cf. Clark & Gerrig, 1990), and facilitate navigation through the interactions.
5.2 Background

Manual gestures are one semiotic resource but by no means the only one through which participants communicate meaning. Nonverbal behaviors have long been implicated in discourse management (Goffman, 1979; Gumperz, 1992; Schiffrin, 1987). One of the aspects of interaction that theoretical linguists have difficulty explaining (and typically leave to others to figure out) is the positioning and stance taking that occurs where interactants manage their relationships to each other. If we aim to expand our analysis of gesture to include these other planes of discourse, then we need to consider how composite utterances are implicated in broader interactional activities like turn management and stance taking.

Frames “constitute the ground” (Gumperz, 1992: 42) upon which interactants make sense each other’s talk. By attending to verbal and nonverbal cues, we are able to parse propositional content from interactive intent. Gumperz (1992) notes that this marking occurs throughout conversations: "Participants actively signal how the interaction is to be framed and managed by means of postural and gestural moves that can be empirically observed through in-depth qualitative analysis" (42). It is this active framing and managing of interaction that I highlight in this chapter.

Goffman (1979) describes footing as a shift “in and out of the business at hand” (2) where participants signal alignments toward each other and toward the talk. For the discourse I examine in this chapter, Goffman’s description of the visual-ness of interactions is particularly potent. He says:

“In the management of turn-taking, in the assessment of reception through visual back-channel cues, in the paralinguistic function of gesticulation, in the synchrony of gaze shift, in the provision of evidence of attention (as in the middle-distance look), in the assessment of engrossment through evidence of side-involvements and facial expression
—in all of these ways it is apparent that *sight is crucial*, both for the speaker and for the hearer. *For the effective conduct of talk, speaker and hearer had best be in a position to watch each other*” (Emphasis added, 6).

Footing is dynamic; it shifts in accord with participants’ ongoing evaluation of each others’ knowledge (information state) and stance (participation framework). Since we know that footing is dynamic, it is important in an analysis to mark the subtle shifts in moves of the body as they occur to trace the development of participants’ stances. Davies & Harré (1999) argue positioning is even more fluid than Goffman’s footing. These shifts are sometimes verbally subtle but gesturally overt (cf. Iwasaki, 2011; Enfield, 2009; Levinson, 2006:61).

Du Bois (2007) pushes these works further proposing a unified framework of stance as composed of three parts. Stance, he argues, is “a linguistically articulated form of social action whose meaning is to be construed within the broader scope of language, interaction, and sociocultural value” (139) and allows for language, gesture, and other symbolic resources to contribute to the construction of a stance utterance. The three legs of the stance triangle represent vectors stance takers vary alignment with each other when evaluating some object of stance. Through linguistic choices (and also nonverbal moves that I analyze here), the analyst can uncover the degrees of alignment presented by each interactant implicated in a stance act.

Kärkkäinen’s (2006) work on stance contributes the interactive volubility inherent in stance taking. She defines stance as “a public action that is shaped by the talk and stances of other participants in sequentially unfolding turns-at-talk” (701). Stance has traditionally been viewed as the expression of internal psychological states of an individual. Kärkkäinen’s view (and also Du Bois, 2007) incorporates the community and culture into the creation of stance. She argues for a shift toward considering “the public nature of displaying stances and the
activity of joint stance taking in discourse” (702). In this sense, stances are built dialogically, based on the prior talk in the interaction; we construct, deconstruct and reconstruct stances based on what occurs in emergent discourse.

5.3 Gesture and the participation framework and exchange structure

In this section, I analyze gesture as it operates on different planes of discourse--in particular the participation framework, exchange plane and action structure. The slices of discourse reviewed here involve rapid turn-taking where one interactant takes control of managing turns. I highlight how eye gaze, manual gestures, torso shifts, and gestural phrases contribute to the realization of the interaction, paying special attention to moves that mark stance.

5.3.1 Hearing group: “Pseudonyms” Discussion

This excerpt comes from the beginning of the game night where the participants have settled into the game playing area and have started to set up the box and review the rules. Sara, the host of the evening, initiates this portion of the interaction, asking for the other women’s pseudonyms that they have chosen to use while taping.

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<th>“Pseudonyms” Discussion, Hearing Group</th>
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<tbody>
<tr>
<td>1  Sara</td>
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<td>2  Mary</td>
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<td>3  Sara</td>
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<tr>
<td>4  Mary</td>
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<td>5  Sara</td>
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Sara follows her initiation request “Can I get everyone’s pseudonyms?” by bringing her open hand to touch her chest (Fig. 5.1) and giving her own name (“I’m Hot Stuff”).

Sara then looks at Tori and holds out her Open Hand Palm Up to her (Fig. 5.2). Though Sara has opened the floor for everyone to contribute something, she is quite clearly constraining her selection of next speaker to Tori. Again, Sara does not verbally utter anything here; eye gaze, torso orientation, and manual gesture are enough signals to transfer the turn. At the same time

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![Figure 5.1: “I’m Hot Stuff.”](image-url)
that Sara holds out her hand to Tori, Mary quickly interjects, “I’m gonna be Tinkerbell” (also Fig. 5.2).

Prior to Sara’s initial request, Mary was not consistently attending visually to the interaction--while Sara asks everyone for their pseudonyms, Mary fiddles with the game box and reads the instructions that she still holds in her hands. As Sara says “I’m Hot Stuff”, Mary starts to move her head to look at Sara. We know Mary is already planning her utterance while Sara speaks because Mary latches onto Sara’s utterance and quickly says “I’m gonna be Tinkerbell” at the same moment that Sara begins to drop her hand in Tori’s direction. Mary has clearly not registered Sara’s management of the turns. By the time she sees Sara’s hand lowered, Mary has already uttered most of her turn (the stroke of Sara’s gesture is executed along with the majority of Mary’s utterance “I’m gonna be Tinker-”).

Sara is not thrown off by Mary’s move. Instead, she integrates it as if she had planned to ask Mary first: turning her torso, repeating Mary’s pseudonym “Tinkerbell” and extending her Open Hand Palm Up to Mary (Fig. 5.3). These gestured moves position Sara as the director of turns, even though she is essentially directing a turn to Mary after the turn was taken. In particular, Sara’s composite utterance signals three things: a ratification of Mary’s pseudonym, a
reinforcement of Sara’s position in control of soliciting each person’s name, and also Sara’s willingness to engage in cooperative discourse (by accepting Mary’s contribution and incorporating it into the sequence).

After acknowledging Mary’s name, Sara returns to solicit a pseudonym from Tori again by shifting her torso, gaze, and her Open Hand Palm Up gesture in Tori’s direction (not pictured here). Like her first turn allocation attempt, Sara does not verbally communicate her desire for a response from Tori. The embodied signals are enough to trigger a response from Tori who replies, “Ooh. I didn’t come up with one”. Tori shifts her gaze from Sara to the neutral space in front of her after she says “Ooh”. The moment Tori breaks eye contact with Sara (just after Tori utters “Ooh”), Sara retracts her hand and rubs her eye at which point Lynn quickly interjects “I’m Earth Mother”. Just prior to this, Lynn visibly checked her co-participants by glancing left to right, clearly attending to Sara’s gestured management of turns. Lynn’s contribution is precisely aligned with the moment Sara retracts her hand and Tori delays her response.

By this time, everyone in the group has given their pseudonyms except for Tori which prompts the others to turn (or keep) attention on her, giving Tori the floor (Fig. 5.4).
Tori does not have an idea, yet, as can be seen in her eye gaze (in neutral space in front of her) and her mouth position (lips pressed tightly closed). She holds this pensive position for two seconds—a lifetime in the quick unfolding of this exchange. After the first second of waiting, Lynn quietly restates Sara’s and Mary’s pseudonyms “Hot Stuff and Tinkerbell”, pointing and gazing at each of them in turn. Lynn doesn’t signal a claim to the floor, though; her lowered voice reinforces that her talk is subordinate (Goffman, 1979). Sara’s and Mary’s gaze remain fixed on Tori during this time, also reinforcing the expectation that Tori will imminently produce at least an option of a pseudonym.

Tori finally obliges, hesitantly offering “Hands On:” drawing out the final syllable, while tilting her head to the right. Sara begins to raise her open hand palm down while saying “How ‘bout Tight Pants?” taking a turn both verbally (by initiating her utterance) and nonverbally (by raising her hand and looking at Tori). Tori doesn’t look at Sara, she completes her utterance by shaking her head back and forth, closing her mouth, raising her right Open Hand Palm Up in gesture space and shrugging (Fig. 5.5).
Here, Tori contributes a completely gestured utterance essentially conveying “I don’t know!” laminating her head shake, closed lips (which appear to be slightly drawn up on the right), raised Open Hand Palm Up and shoulder shrug. The embodied markers are not in response to Sara’s suggestion of “Tight Pants” but to her own struggle thinking of a good pseudonym.

To review what I have discussed so far, Sara’s moves to regulate turns are physically manifested and mark her orientation to the exchange plane and also the participation framework. She marks control over turn regulation (thus positioning herself as in charge) and also signals her willingness to be a cooperative interactant (by shifting her turn allocation to Mary when Mary interjects a turn before Tori). The other participants respond to Sara’s nonverbal signals in kind. Lynn sweeps her gaze at Mary and Tori before uttering her own pseudonym and delays her reply to Sara’s initial request based on Sara’s nonverbal turn allocation techniques. These further endow Sara with the position of turn regulator and position Lynn as a cooperative interactant. We see here, quite clearly, what Kärkkäinen (2006) means in terms of the intersubjectivity of stance creation. These participants develop orientations toward each other and toward the task at hand through assertions (like Sara’s turn regulations) but also
through endowments (like Lynn’s attention to the other players’ moves) that emerge as talk unfolds.

We can clearly see in this exchange the amount of interactional work participants conduct through their bodies both with and without the “support” of speech. The amount of information communicated verbally is scant; sentence structures are basic and there is a lot of repetition of utterances. The nonverbal signals, on the other hand, largely manual gestures, eye gaze, and a gestured phrase, convey the bulk of the information that makes this interaction work. Sara positions herself as the one in charge during this exchange subtly through her talk and more overtly through her gestures. The participants deftly shift from executing a co-occurring deictic point with speech toward an interlocutor to an utterance without speech then to gesturing an emblematic phrase like Tori in her final nonverbal utterance. At the very least, we glean that gesture plays a crucial role on the exchange plane which, in this example, is central to the interaction itself.

In the next example, I turn to consider an analogous exchange in the deaf group where one participant takes control as turn regulator and uses composite utterances to accomplish a specific interactional goal of collecting food orders.

5.3.2 Deaf group: “Pizza orders”

As already mentioned, one of the differences between spoken and sign discourses is that sign discourse must be seen in order to be heard. Whereas in the hearing group, we saw Mary reading instructions while still attending and responding to surrounding talk, in the deaf group, once a person breaks eye contact, it is assumed that he/she does not see what is happening
around them. Part of engaging in sign discourse involves the tacit understanding that interactants will monitor each other’s gaze, marking who sees what, and then assessing whether to relay information to those who have looked away. Eye gaze sweeps and checks occur frequently in sign discourse; it is the main way that deaf people monitor the goings-on around them. We can characterize eye gaze as a visible boundary marker of that “fluid and invisible shell” (Enfield, 2009:34) that defines the engagement area making it an important marker of the participation in the overall exchange structure.

Like Sara’s request for pseudonyms, Jane’s regulation of turns in this example signals attention to her interlocutors and also marks her stance as orchestrating the round of orders. There are clear parallels in the use of manual signs and use of space. Jane extends her arms beyond neutral sign space to articulate specific interactive information. I discuss the effect of these composite utterances on turn-taking and stance marking. The physiological need to see signs (or to have one’s signs seen) introduces an interactive norm unique to sign discourse that I also explicate in this section.

This speech event consists of Jane soliciting pizza orders from her co-participants. Even though she is a guest, Jane makes the move to bring pizza from the kitchen to the table for each participant. She initiates the sequence, “I WANT #PIZZA, BRING FOR YOU (points to Tammy)?” “I want pizza, should I bring some from you?” which prompts Tammy to laugh—presumably because Jane is the guest but is clearly hungry enough to be driven to get pizza for herself.
| 1 | Jane | I WANT #PIZZA, BRING FOR YOU? | Gets up out of seat, moves in direction of kitchen |
| 2 | Tammy | laughs YES [PLEASE= | |
| 3 | Jane | ]HOW-MUCH YOU WANT? | |
| 4 | Tammy | =ME ONE (raised up and out of sign space) | Squints eyes, shakes head BAF, mouths “one” |
| 5 | Jane | ONE (neutral > raised brows)? | Jane holds rh ONE in space |
| 6 | Tammy | Dropping ONE, bundled HSPUs place on table (like holding a plate) shakes head, lowers brows | EG > table |
| 7 | Jane | shifts weight to L leg, raises brows and tilts head down slightly--looks Surprised like “Huh?” | |
| 8 | Tammy | TWO (far outside sign space), nods head makes squints eyes | EC > Jane |
| 9 | → | → Jane Rh TWO nods head | Jane holds rh TWO |
| 10 | → | → lh: waves to Todd (far outside sign space) | EC > Todd |
| 11 | → | lh: #PIZZA HOW-MUCH WANT YOU? | Tammy: lowered, lowers lh, taps Jane’s arm, EC > Todd |
| 12 | Todd | rh: OHPI | EC > Jane |
| 13 | → | → Points to Jane, wiggles fingers..CHEESE WILL wiggles fingers TWO. | Jane holds lh YOU in space |
| 14 | → | → Jane Lh TWO nods head | Jane’s lh TWO |
| 15 | → | → Tammy RED #PEPPER claw HS>O HS shakes in place | Tammy: wiggles fingers at Jane Holds hand in space, EG > Todd |
| 16 | → | → Jane … Nods, brows raise | EC > Tammy |
| 17 | → | → rh: #DODO #PIZZA #ALL PLAIN? | |
Jane starts to walk toward the kitchen (shifting her weight to her right foot) and asks Tammy how many pieces of pizza she would like. Tammy replies ONE which Jane repeats (Fig. 5.6). Instead of dropping her hand, though, Tammy holds the sign ONE in space while breaking eye contact with Jane (and coughing). This prompts Jane to suspend her impending departure to the kitchen which we can see as she shifts her weight back to her left foot.

Tammy’s move also prompts Jane to hold her repetition of ONE in space while raising her eyebrows and tilting her head slightly to the left. This is the first time we see Jane hold a number in space over a series of subsequent moves by other participants. By holding the ONE in space, Jane visually holds her claim to the floor but also, because her brows are raised and her head is tilted, confirms with Tammy that she indeed wants one slice. In order to understand
this utterance, we must analyze the constellation of semiotic signs beyond what is conveyed through Jane’s hand.

Because Tammy is looking at the table all this time we cannot be sure that she sees Jane. However, Tammy likely assumes that Jane is monitoring her, otherwise she (Tammy) wouldn’t hold her ONE in space. Tammy reestablishes eye contact with Jane and changes her order to two (Fig. 5.7). Tammy’s eyes are squinted and her lips are rounded (mouthing “two”). She also nods her head twice while holding the sign in space. Jane confirms by signing TWO and nodding her head once then quickly shifting eye contact to Todd.

Figure 5.7: Tammy signs TWO, Jane repeats TWO

Notice how far outside neutral sign space Tammy extends her TWO. The placement of the sign visibly marks its contrast to her initial order ONE. In terms of space, the extension also targets Jane as Tammy’s addressee like Sara’s handing over the turn from Mary to Tori with the Open Hand Palm Up gesture. Here, Tammy accomplishes the same interactive goal laminating a symbol (the sign TWO) with a gradient feature (the extension of the arm). Thus, the composite form in this example functions as both a transfer of information (through the sign TWO) and a transfer of speakership rights (through the extension of the arm). This is distinct from what we saw in the spoken discourse where propositional content was conveyed through speech and the
turn regulating was conveyed through gesture. Though we do see propositional content-laden
gestures also performing turn regulation in spoken discourse, it is not possible for spoken words
to merge with manual gestures.\footnote{An analogous scenario in spoken language to this example would be spoken words imbued with prosodic gestures.}

Jane maintains control of the floor as she holds her signs in space, however, she is also
dowed that control by her co-participants. We see clear evidence of this in Tammy’s next set
of moves. After signing TWO, Tammy drops her hand briefly at which point Jane quickly
breaks eye contact to solicit a turn from Todd (Fig. 5.8).

![Figure 5.8: Jane holds TWO while waving to Todd](image)

As we can see, the moment Jane looks away, Tammy takes up her hand to add to or alter her
order. If this were a spoken conversation, a verbal retraction would be enough for the speaker to
turn back to her addressee. But in this case, because Jane cannot sense Tammy’s turn initiation,
Tammy must actively solicit (or wait for) Jane’s attention. Deciding whether or not to do so
requires an assessment of Tammy’s place in the participation framework: Tammy must
determine if she wants to risk being viewed as rude by interrupting Jane’s interaction with Todd
or if she wants to withhold her correction until Jane is done.
Notice, Jane continues to hold her right TWO from her exchange with Tammy while she waves with her left hand to solicit Todd’s attention. The TWO is no longer a proposition but a buoy (Liddell, 2003) that serves as a visual trace of Jane’s recent interaction with Tammy, and also a signal that Jane is still engaged with Tammy, even if that engagement is temporarily suspended. In this context, the buoy also functions as a mechanism through which the other participants, if they did not witness Tammy and Jane’s conversation, can see that some kind of exchange between them had transpired.

Once she has Todd’s eye contact, Jane asks him (with her left hand) “#PIZZA HOW-MUCH WANT YOU (Todd)?” “How many pieces of pizza do you want?” After signing YOU, Jane holds that deictic directed at Todd while he formulates his order (Fig. 5.9). Jane’s point to Todd does two things: it transfers speakership rights to Todd temporarily (by holding it in space, she signals to Todd the expectation that his response will be quick and to the point) and it reinforces her stance as regulating this portion of the interaction. A great deal of overlapping moves occurs at this moment in the exchange. Even with multiple interlocutors, or perhaps especially because of them, Jane maintains control primarily through her manual forms and physical positioning. There are other signals that further validate this stance: the orientation of her torso toward the table, the prolonged “at the ready” position of her hands, and that she is standing rather than sitting, compelling her addressees to look up to her.
Todd does not yet know what he wants: he hedges his turn with turn-holding fillers (pointing to Jane and wiggling his fingers). His speakership is endorsed by both Jane (who is looking and pointing at him) but also Tammy. Though Tammy waves her hand at Jane for a turn (Fig. 5.9), Tammy is looking at Todd. She also does not take inordinate steps (like touching Jane or tapping the table) to get her attention. The sum of these behaviors signals Tammy’s desire to take a turn next but not now. How might this be communicated to Jane (the intended recipient of Tammy’s solicitation)? That is Todd’s job. Because he can see what’s happening behind Jane, he is charged with determining whether ambient input is worth relaying to her. If Tammy were adamant about getting Jane’s attention, she would either tap the table or Jane or ask Todd to get Jane’s attention for her. Since Tammy does none of these, Todd reaches the correct conclusion that Tammy does not need to tell Jane something immediately but that she will do so after he is done.

The unfolding of the behaviors of the body in this way (Jane breaking eye contact with Tammy, Tammy wanting to add to her order) introduces interactional demands on other interactants. Here, if Todd wants to be cooperative with Jane, he should comply with her request for his order. But to signal cooperation with Tammy, he should also be attuned to her desire to
get Jane’s attention. These judgments, of course, are made on the spot likely without conscious thought. Unless we understand the structure of the participation framework, we cannot fully account for why Tammy looks at Todd while still continuing to wave at Jane who cannot see her.

Once Todd finishes his order, Jane repeats the amount (TWO) and holds that sign in space, only this time it is her left hand held near Todd. At the same time she turns back to Tammy who adds to her original order, “RED #PEPPER claw HS>O HS shakes in place” “Can you bring red pepper flakes?” to which Jane replies with raised brows and a head nod. Still holding her left hand TWO in space, Jane asks (with her right hand) “#DODO #PIZZA? #ALL PLAIN?” “What kind of pizzas do you have? All plain?” (Fig. 5.10).

Figure 5.10: Jane holds TWO with left hand, asks Tammy “#DODO #PIZZA?”

Tammy does not know the answer to this question and turns to John to ask him. Jane endorses John’s claim to the floor by shifting eye contact to him, however, she also maintains her physical position signaling control of the turn-taking.

I would like to point out the similarities in both hearing and deaf groups thus far. Sara signaled her control of turn-taking through embodied markers (directing her Open Hand Palm Up to Mary although Mary had already initiated a turn, then directing her Open Hand Palm Up
to Tori a second time). Jane does this as well, manipulating her manual articulators to convey meaning and facilitate turns. Both hearing and deaf groups use eye gaze, manual gesture, and torso orientation as integrated components of a larger discourse unit to navigate through the quick succession of turns for a clear, interactional end (in the hearing group, a list of pseudonyms and in the deaf group, a list of orders). Both groups do not (cannot?) rely on one stream to accomplish these exchanges. Rather, all of the articulators work together—simultaneously and in some cases sequentially—to signal not just content but also information about the interaction. I have briefly discussed positioning and stance taking in the previous two examples. In the next section, I examine these in more detail.

5.4 Situated activity: Engaging with the game box

I have demonstrated that the body and its articulators are implicated in the management of turns (exchange plane) and signal dynamic shifts in stance (participation framework), in this section I turn to examine composite utterances that emerge while participants decipher how to operate the game box. In these examples, interactants shift their bodies as they incorporate the physical materials into the interactive space. For instance, to depict actions of the cards in the game box, gesturers extend their gestures beyond neutral gesturing space to position forms close to the game box. The discourse in these examples is task-oriented. Participants juggle propositional content with orientations to the participation framework all while trying to decode how to play the game. Gesture, in particular, facilitates the navigation through these planes of discourse.

5.4.1 Hearing group
I return now to the larger speech event in the spoken group concerning the game box, when Mary and Lynn are the most active in setting up the game. Mary reads and relays the instructions while Lynn manipulates the cards and the game box. Sara and Tori, on the other hand, are positioned as bystanders (ratified but unaddressed, Goffman (1981)), watching and making side comments to each other, often joking about needing more wine (“Where’s the wine bottle?”) or jabbing at the difficulty of the game (“Oooh Levels!”). Though Mary and Lynn facilitate the game set up initially, once enough information about the rules is shared, all of the women join in determining how to play the game. I analyze the gestures for propositional content but also emphasize their contribution to facilitating the interaction between participants.

Up until this point in the interaction, Mary has taken charge of reading the rules to herself then relaying them to the group. She never verbally announces this position but physically conveys it using meaningful signals, primarily her manual gestures, torso orientation, and eye gaze.

Without considering these elements of the exchange, we would misinterpret the intentions of her utterances and the co-participants’ responses.

With the addition of physical materials, the perimeter of the “engagement area” (Enfield, 2009) expands. Manual gestures are linked to objects in the surround (e.g., the game box) and participants begin to incorporate these as part of the semiotic framework. I talk about the collective work toward finding out how to use the game box as invoking several spaces (cf. Barber’s (2005) “chained space”). Participants fluidly carve out spaces that become imbued with interactive meaning. First, the instructions that Mary uses as the information source become part of the activity space. Second, the game box and the associated cards become linked to the instructions by its affiliation with the rules of the game. Third, the area above the coffee
table becomes endowed as the interactional space where co-participants relate to each other as
teammates (e.g. Lynn to Tori) and to each other in creating the discourse. I show how "human
interaction transforms merely physical space into meaningful space" (Enfield, 2009:32). To
understand the underpinnings of the exchange, we must necessarily consider the utterances as
inherently composite, which includes all of the articulators available to the interactants and
materials in the surround. To separate one from the other, privileging form over function, only
leaves us with a partial understanding of how these groups engage.

Tori first asks Mary and Lynn whether they have to “Act out four cards?” but Sara is the
one to reply to Tori, “I guess you get one..Oh! You get one and you just keep droppin’ ‘em.”
Sara’s left hand is configured with her index extended palm down (Fig. 5.11). She moves the
hand in a small, clockwise arc (from her perspective) when she utters “you get one”.

Sara looks at the game box while Tori (who is blocked in this shot by Lynn) looks at Sara. Both
Mary and Lynn are not visibly attending to Tori or Sara, which is not entirely surprising; Mary
and Lynn have already positioned themselves as actively engaged with game setup while Tori
and Sara are positioned as passive observers. This results in an unstated division between the
four women where Mary and Lynn, Tori and Sara are aligned as dyads. Mary and Lynn continue
to orient themselves to their own parallel tasks (Mary reads the instructions while Lynn examines the clue card very closely). This unspoken division (cf. Iwasaki, 2011) becomes important for interpretation of subsequent talk, which I address later.

Sara appears to have figured out how the box operates in the next utterance marked with the discourse marker *oh* which signals a shift in information state (Schiffrin, 1987). At the onset of this utterance, Sara points to the game box and holds her gesture in space during a brief pause after “one” (Fig. 5.12). She then produces the next gesture where her flat hand (depicting the shape of a card), palm facing her left, makes a series of three inverted jumps (downward not upward) to her left (Fig. 5.13 A&B).

These two forms constitute a gesture phrase: she starts with the deictic point (verbally encoded as “one” referring to the first card) then the predicate, where the hand (now in the shape of a
card) drops in succession (as the cards drop in the game box). Demonstrating the composite nature of these utterances, the movement of the spoken referent is encoded in the gesture while the speech encodes the referent.

I want to point out three markers of the ideational plane and information state that these manual components of Sara’s two utterances display. First, concerning the propositional content of the utterance, Sara clearly produces a gesture phrase which can be glossed IT (card) DROP DROP DROP. Her co-occurring verbal utterance is less clear; she uses the anaphor “one” for card and the hedge “just” to introduce the verb phrase “keep droppin’ ‘em”. The repetition of the referent “you” which, in the second instance (“you just keep droppin’ ‘em”), really refers to the game box not the player. Her gestures though are fairly elaborate in comparison, especially when viewed next to the same utterance in ASL (Figure 5.14 A&B) where the manual utterance conveys the same information without speech.

My second point, less obvious, point concerns an embodied marker of the speaker’s positioning conveyed through her use of two deictics that co-occurred with the anaphor “one”. Two times, Sara states “you get one” while simultaneously gesturing a deictic. In the first instance, the phrase is prefaced by “I guess” which hedges her claim and her hand moves in a
small half circle, low in front of her knee (visible to Tori but not necessarily the entire group). Sara then repeats the phrase prefaced by the discourse marker *oh* and transforms the deictic (referring to the same “one”) by moving it away from her body into the game activity space. Sara’s shifting certainty in her proposition is reflected in the physical positioning of her gesture: at first close to her body when less certain and then extended away from her body as she becomes more certain. Her body, then, contributes to the manifestation of dynamic stance. Extending the gesture outside her gesture space parallels the greater certainty she expresses in her speech.

The third and final point I want to highlight in this example concerns how the ideational content shifts as talk unfolds. Sara rephrases this utterance later in the exchange. Both the speech and gesture transform significantly between the first and second instance. I reproduce both utterances (Figs. 5.12, 5.13 and Fig. 5.15 A&B) below for comparison.

**First mention:**

“Oh! You get one and you just keep droppin’ ‘em.”

IT DROP DROP DROP ↘ ↘ ↘

Figure 5.12: “Oh! You get one..”
Second mention:

“So as soon as you get one you move on to the next one”

IT DROP DROP ↘ ↘

The spoken portion of the first mention (“you get one and you just keep droppin’ ‘em”) is less elaborate than the second mention (“so as soon as you get one you move on to the next one”), which clarifies the sequence and the action the player is expected to take (not to “drop” the cards but perform the next clue). The gestured portion, on the other hand, becomes less complex in the second mention. In the first, we see a clear gesture phrase with two distinct handshapes and three jumping movements of the hand. In the second, we see only one handshape and two jumping movements of the hand.
The next portion of this speech event I would like to examine ties together the variety of
gestural moves that emerge as these women augment their understanding of the game and also
signal respective stances. Thus far, I have discussed how both groups use composite utterances
to manage turns, negotiate their relationships to each other and to prior talk, and convey
propositional content in relation to materials situated in the game space. I begin here by picking
up the exchange where Lynn begins to enact what a turn during the game might entail. She
introduces a constructed enactment by saying “So like say Tori and I are teammates-” while
shifting her torso to face Tori, pointing to Tori and then herself (not pictured) as she verbally
references each. Lynn then continues her turn (notably ignoring Mary’s attempt to interject) and
says “I see my word Earmuffs” (Figs. 5.16-5.18).

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Lynn produces a series of gestured moves in this utterance that inform, instruct and depict (action structure) accomplishing both descriptions and demonstrations (Clark & Gerrig, 1990). First, she lifts the card from the game box (while saying “I”) (Fig. 5.16), holds the card in front of her face (while saying “see”) (Fig. 5.17), then brings the card close to her body (while saying “my word Earmuffs” (Fig. 5.18).
“my word Earmuffs”) (Fig. 5.18) establishing eye contact with Sara. Lynn mixes her depiction of what the game play will look like with narration of her moves with speech—a similar phenomenon we saw in the mixing of performance and interactive gestures during game play. “I see my word Earmuffs” is semantically incomplete when considered without the co-occurring moves of her body and her interaction with the card. By picking up the card, looking at it, then holding it to her chest, Lynn creates a composite utterance that conveys the sequence she thinks players will be expected to follow: “I” 1) Pick up a card, 2) Look at the clue “see my word Earmuffs”, and 3) Hide it from view. Her speech conveys only that she looks at the clue (“I see”) when it is her turn (“my word”) but does not say that the player should pick up the card or hide it from view. *In toto*, her spoken-gestural utterance can be glossed as follows [gestured glosses are capitalized, inferred meaning is in italics, verbally uttered phrases in quotes]: “I” PICK-UP THE CARD “see my word Earmuffs” and HIDE THE CARD FROM VIEW, which is what the listeners glean from the sum of her moves.30

Besides the fact that she narrates her depiction (displaying orientation to the action structure and ideational plane), Lynn is also oriented to the participation framework and exchange plane because she explicitly makes eye contact with Sara at the end of the phrase (as opposed to actually playing or working through the sequence for her own benefit). Thus, we see how Lynn constructs this hypothetical enactment of a turn while engaging in the interactional space, constructing her talk in relation to the three others.

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30 Part of the problem we face when analyzing gesture (which is the same problem we encounter when analyzing sign language) is that it has no written form even though it conveys meaning. Kendon (2008) discusses this issue as fundamentally impacting gesture’s peripheral role in the analysis of spoken language. I do not deny that there are clear limitations to transcribing gestural content (not to mention sign) using glosses; we risk falsely or inaccurately attributing meaning to forms. However, the benefit of glossing gesture in this way, is we see how perfunctory our incorporation of its meaning is into our understanding of verbal utterances.
Lynn’s next gesture (Fig. 5.19) is not co-articulated with speech and does not gain a spoken referent until the completion of the (verbal) independent clause. The gestured referent becomes explicit in the subsequent dependent clause thus widening the gesture’s impact.

Figure 5.19: <silence> Lynn points to Tori

Figure 5.20: “And I have to act it out-” Figure 5.21: “-for her to guess”

Lynn juggles two things during this turn. First, she introduces Tori as her hypothetical teammate in the depicted scene (by pointing to Tori, Fig. 5.19). Second, she returns the card to the game box (Fig. 5.20) which is the fourth and final step in the sequence we examined in the last example (To review: 1. Pick up a card, 2. Look at the clue, 3. Do not show it to the others, and now, 4. Return it to the game box). After she puts the card back in its slot, Lynn says, “And I have to act it out for her to guess” and points again at Tori (Fig. 5.21). Lynn briefly established eye contact with Tori when she pointed to her the first time (if this were signed discourse, it
would be glossed YOU) yet in her speech, Lynn uses the anaphor her to reference Tori. Lynn’s use of the verbal pronoun her with the gestured pronoun YOU is evidence of this overlapping activation of two different interactive goals: first, depicting what the sequence might look like (by acting it out) and second, informing the audience of the sequence (by narrating the action and using her instead of you) (cf. Clark & Gerrig, 1990).31

In the next section, I analyze how the deaf interactants incorporate the game box while deciphering the rules of the game. Because signers are able to physically position sign utterances in different locations in space, there exists the potential for these utterances to be placed on or near the physical materials—just as we saw Sara do with her gesture phrase (IT DROP DROP DROP). I also highlight an analogous example to Lynn’s reenactment of a turn.

5.4.2 Deaf group

John and Todd are the primary participants in this example. Tammy is present but reading the instructions most of the time. John addresses Tammy at one point (through eye gaze) but she ends up stepping away from the table about midway through this portion of the talk.

There exist several parallels to the data just examined in the hearing group, especially in terms of shifting gestures outside neutral space, incorporating physically present materials (the game box), and depicting the actions players are expected to take during the game. What is different in this example is that representation of the action (akin to Lynn’s reenactment of the turn) takes on the full burden of communication as John instructs Todd how to play the game through embodied enactments. There are depictive constructions John uses that resemble (in

31 I might add that the depiction also serves as a sort of dry run where Lynn works out the kinks in her own understanding of the sequence.
form, function, and meaning) the utterances in the spoken data. The line between gesture, sign, and constructed action becomes incredibly blurred. I point out that the cross-modality similarity provides more weight to the argument for methodologically approaching analyses of gesture in speech as we analyze sign languages.

<table>
<thead>
<tr>
<th>Engaging with the game box, Deaf group</th>
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Unlike in the previous group where Lynn was not entirely sure about how a turn unfolds, John seems to understand the sequence of events in a turn. He first points to a list buoy of four (cards) while raising his eyebrows and looking at the instructions on the table (Fig. 5.22). By looking at the instructions, John visibly invokes the source from which he is gleaning this information. The move also positions himself as more knowledgeable (and thus an authoritative voice, Raymond & Heritage, 2006) about the game than Tammy and Todd.
He proceeds to explain that the player selects an Easy or Hard clue (visually indexing the instructions on the table) then places each card in the game box (Fig. 5.23 A&B). The Easy/Hard contrast is demonstrated through the orientation of the right hand (fingers facing the floor then ceiling) while the game box is invoked through his left hand which is held horizontally touching his left wrist (Fig. 5.23B). John then alternates the orientation of the right hand (fingers pointing up then down) while moving it across the left hand. The actual game box is on the table but is not yet invoked in John’s utterances. Its visible presence provides Todd and Tammy with enough information to understand why John is configuring his hands in such a way. That is, the interpretant of the proposition is in part triggered by the physical proximity of the sign and the corresponding object.32

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32 This construction is a *rhematic symbolic legisign* because it is apprehended as an icon.
Once John depicts the cards as they are placed in the slots, he signs TURN-ON (Fig. 5.24) while leaning toward the game box, raising his brows (marking new information) and shifting gaze to the game box (signaling to Todd where to direct his attention) now invoking that physical element in the engagement space.

Like Goodwin’s (2011) analysis of the marketer tossing a cookie package while dismissing the marketing strategy for selling the bag of cookies, John uses the actual game box as the object of the sign TURN-ON. John then physically turns the timer on the game box (Fig. 5.25)--an action whose linguistic representation (Fig. 5.24) is practically identical. While lowering his brows
which signals a shift in the purpose of the action (from informing Todd when his brows were raised, to demonstrating the move when his brows lowered).

Figure 5.25: John leans over, turns the timer

John begins an utterance in Figure 5.26 where he looks like he signs “PUSH-DOWN?” with his hand held over the clapper on the game box. In fact, John is not entirely sure if this is what needs to happen and he doesn’t complete the move to push down the clapper. Instead, he tells Todd to feel the timer when it is deployed (Figure 5.27). John depicts the timer’s vibration by producing a bilabial trill. Todd misinterprets John’s intent and moves to push down the clapper instead of feeling it.

Figure 5.26: John signs/gestures/acts out PUSH-DOWN? with raised brows
Figure 5.27: Todd complies with John’s call to feel the timer

John reacts to Todd’s move by waving his hand “no” close to the game box while mouthing “no”, shaking his head, raising his eyebrows and looking at the game box (Fig. 5.28).

Figure 5.28: John waves hand “no” as Todd moves to push down the clapper

These moves capitalize on Todd’s visual attention to the signs around him. The presence of the game box has altered the physical positioning of these interactants’ bodies: John leans over the table, both men shift their gaze back and forth from the box (which has become activated as a semiotic resource) to each other. The box and the instructions have also contributed to a shift in these participants’ footing. Recall the discussion in Chapter 4 between John and Todd where Todd tried to explain to John that his body ached less when he ate meat. In this example, John is positioned as having more knowledge than Todd about the game (cf. Raymond & Heritage, 2006). This is not explicitly announced but inferred based on the
contextualization cues (Gumperz, 1992) we (and Todd) calculate as the talk unfolds. The hand wave “no” over the game box, effectively preventing Todd from carrying out his move, is one such signal reifying this position. Todd also endows John with this position when he maintains his addressee role and complies with John’s instruction to feel the box.

I return now to the remainder of the exchange where John makes a series of moves while enacting the sequence of a turn. Like in the example when Lynn enacted “I see my word Earmuffs”, John weaves the linguistic code with gesture and the game box to articulate how a turn-at-play should transpire. I call attention to the use of multiple articulators in this example to express propositional content (especially salient when John mouths words while gesturing manual content near the game box) as this calls into question the analytic utility of separating gesture from sign (and gesture from language more broadly) when examining talk in interaction. Separating the two becomes, as Duncan (2003) states, “merely an issue of explanatory convenience” (262).

In Figure 5.29 A&B, John continues to look at the game box just after he told Todd to leave the clapper alone. What is interesting in this utterance (Figs. 5.29-5.31) is the quick sequence but also the co-expression of forms, some that could qualify as gesture, some as hybrids, some as signs. To capture the array of articulators implicated in constructing this utterance, I will use single quotes to denote words that are *mouthed* but not signed, underlined text to describe meaning derived from the signer’s eye gaze, italicized words to represent deictic points, and capitalized words as glosses for manually produced signs. Applying this convention, the transcribed utterance reads, ‘If you GESTURE FOR A WHILE *this* the card that is in this slot? ‘will’ DROP DOWN INTO THE BOX.
John already has a claim to the floor. He has positioned himself as “in charge” of this portion of the interaction, but he still manages his interlocutor’s engagement through the unfolding talk. We see evidence of this in John’s use of deictic eye gaze (directing Todd to look at the box) and behaviors of the eyebrows (which set up a conditional phrase). While uttering propositional content about how the box is implicated during a turn (Figs. 5.29A, 5.30, 5.31 A&B) John looks
at the box, signaling to Todd where their joint attention (Barber 2005) should be. John checks in with Todd (Fig. 5.29 B) at a boundary of an information package (Baker 1977) only to return gaze to the box while he completes the conditional clause.

What is compelling in this example is the amount of symbolic meaning conveyed through different articulators to express what is manually a very short utterance. To review, John mouths ‘if’ while looking at the game box just before shifting gaze to Todd and signing GESTURE FOR A WHILE. He then points to the game box with his brows raised and pauses slightly to be sure Todd looks where he is pointing. John quickly mouths ‘will’ while setting up his depicting verb (the flat hand that depicts the card in a slot) which he places very near the box (he no longer uses his left hand to stand in for the game box) and then drops the flat hand down to depict what will happen if the player gestures too long. It is clear that Todd understands John’s description (he nods in response) and it is also clear that John is not producing “broken” sign even though a large part of his utterance is conveyed through forms that could easily be labeled paralinguistic. At this level of analysis, dividing gesture from sign is less important than examining how the articulators work together to construct such an utterance and, more importantly, that such integration is not marked.

Now that I have discussed at length the means by which interactants manage turns, display shifts in footing, and demonstrate actions through gesture, I shift attention to how interactants juggle orientations to different planes of discourse at once. The juggling that occurs, both intra- and inter-speaker, is conveyed through composite utterances where speech and gesture do not always temporally co-occur. It is important to note that the incongruity of these two channels does not result in interactional mayhem but rather facilitates participants’
navigation through communicative trouble spots. In other words, the participants use embodied moves in conjunction with their words to make sense of the interactional space before them.

5.5 Stance taking and composite utterances

In this example, I focus on the remainder of the exchange between the hearing participants that I first analyzed in Section 5.4.1. A complex array of deictic points emerge among the four co-participants in the last part of the exchange concerning the game box. These points are referential but do not always complement the speech semantically nor do they always occur with speech at all. The points reveal important information about the speaker’s conceptual organization of the unfolding talk while the layering of these gestures with speech visually reveals how participants manage a variety of interactional goals *ad hoc*: depicting how to play the game, signaling the source from which rule-related information is gleaned, and marking their own positions in the participation framework.

The last set of utterances in this exchange finally resolves the sequence of a turn-at-play. Recall, Tori initially asked Mary and Lynn if they were to act out four cards and Sara replied that they take one card and then move down the row. Neither Mary nor Lynn initially replied to Tori’s question as they each attempted to figure out what to do next. The layering of orientations to different planes continues to occur here where the speaker demonstrates an action, informs her audience of the sequence, and connects with specific interlocutors through eye gaze. I return to the last part of the exchange where Sara and Mary join in with Lynn to resolve the lingering
misunderstanding about the cards and the game box.

<table>
<thead>
<tr>
<th></th>
<th>Lynn</th>
<th>What I don't know is-what does it say to [do with?-</th>
<th>Points to game box (rh), points to Mary (lh) looks at Mary</th>
</tr>
</thead>
<tbody>
<tr>
<td>62</td>
<td>Sara</td>
<td>Well there's three other cards</td>
<td>Points to game box with index and little fingers raised</td>
</tr>
<tr>
<td>63</td>
<td>Lynn</td>
<td>[Yeah.</td>
<td>Picks up a card from pile and puts it in the game box--does not look at Sara</td>
</tr>
<tr>
<td>64</td>
<td>Sara</td>
<td>[So as soon as you get one you move on to the next one to try and you try to get as many as you can in that time.</td>
<td>Moves index and little fingers in two little jumps to the left</td>
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<tr>
<td>65</td>
<td>Mary</td>
<td>Ok. &quot;Act fast because you have a few: seconds&quot;..</td>
<td>Holding instructions, reading</td>
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<td>66</td>
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<tr>
<td>67</td>
<td></td>
<td>Ohh. &quot;You have a few seconds to get your teammates to guess the word and grab the card,</td>
<td>Raises eyebrows with rising intonation on “card”. Then</td>
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<tr>
<td>68</td>
<td></td>
<td>Points to Tori without speech nods once.</td>
<td>Brows still raised.</td>
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<td>71</td>
<td></td>
<td>“before it drops out of sight and out of reach”,</td>
<td>Points to the game box two times on “sight” and “reach”</td>
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<tr>
<td>68</td>
<td></td>
<td>[So you guess and grab.</td>
<td>Points to Tori then with ring handshape picks up a card. Then retracts her hand to her gesture space and holds ring handshape over the next several turns</td>
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<tr>
<td>69</td>
<td>Sara</td>
<td>[Ooohhh.</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>Lynn</td>
<td>[Ooohhh.</td>
<td></td>
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</table>

Lynn has just ended her brief enactment of her interpretation of the sequence (“I see my word Earmuffs”). She has just pointed to Tori (“for her to guess”) when she then points and looks at the game box and says, “What I don’t know is-What does it say to do with-?” (Fig. 5.32 A&B).
When Lynn says “What I don’t know is-” she is pointing to and looking at the game box (Fig. 5.32A) where she just returned the card she used to enact a sequence of the turn-at-play. Notice, Tori and Mary share joint attention with Lynn. We can infer that by returning gaze to the game box (that has only one card in it and not the requisite four) she is most likely signaling that she doesn’t know what happens next in the sequence. She quickly turns to Mary, points to the instructions, and asks “What does it say to do with-?” (Fig. 5.32B). Mary does not immediately reply; she looks down to consult the instructions. Sara, however, offers her understanding of the process: “Well there's three other cards. So as soon as you get one you move on to the next one to try and you try to get as many as you can in that time” (I analyzed this utterance in Section 5.4.1 as a rephrased composite utterance). Sara’s assertion is correct but Lynn only peripherally attends to it: she says “yeah” but continues to fiddle with the box.

Until now, Lynn has asserted authority (Raymond & Heritage, 2006) over her knowledge of the rules by informing and quasi-performing (or describing and depicting, Clark & Gerrig, 1990) a turn sequence to her co-participants. When she reaches the impasse here, Lynn states her lack of knowledge but elides the part that she does not know. Sara attempts to fill in that gap but Lynn shifts to Mary--more accurately, the instructions Mary is holding--as the source of the missing information. While this might seem entirely unremarkable that Lynn asks Mary what
the instructions say to do next, Sara has mentioned several times prior that she played this game before and has explained what happens in the sequence two times. Though Tori has taken up Sara’s response (by nodding), Lynn and Mary only do so peripherally. Technically, Lynn and Mary are the novices to this game but their physical ownership over the game playing space (holding instructions, manipulating the cards and box) creates a sort of invisible boundary wherein they essentially perform how to play the game and thereby assert their epistemic rights to this knowledge (Raymond & Heritage, 2006). Sara and Tori are bystanders (or ratified, unaddressed participants, Goffman (1981)), not because of ignorance but because they have been positioned (and also position themselves) accordingly.

Mary consults the instructions and eventually finds information worth delivering. I examine here a complex assortment of gestures that communicates multiple layers of referential meaning, each of which operate on different planes of discourse. The string of gestures is quick, the co-occurring speech is not always complementary, and the resulting utterance provides enough information to satisfy the unsettled requests (as evidenced by two of the three women’s choral response “Ohhh”). Mary states “Ohh. ‘You have a few seconds to get your teammates to guess the word and grab the card,’ <with raised eyebrows, points to Tori, no speech> (Fig. 5.33) ‘before it drops out of sight and out of reach’.”
The point to Tori does not co-occur with speech, nor is it made explicit through a verbal referent (like “you”) in Mary’s talk. To uncover its meaning, we have to look farther back in the exchange to Tori’s last turn. Tori had asked several minutes earlier, “So act out four cards?” which triggered this line of inquiry in the first place. Mary’s point to Tori does not refer to the card nor to Tori (the two most salient possibilities for a deictic in this slot); it is a long distance marker of the connection between Tori’s clarification request and the response Mary is currently giving.

The relationship is more complicated than this, though. Mary’s speech highlights the card as the subject of attention (raising her brows, rising intonation, then pointing to Tori) but Tori never asked about what to do with the card, she asked if they had to act out four cards. What Tori did do, though, was initiate a string of turns by Lynn, Sara and Mary that spun from the card theme. The trajectory of the action structure can be schematized as follows:

```
Tori--Asks: Act out four cards?
  ↓
Sara--Responds: You get one, then act out three more (subordinated by Lynn and Mary)
    ↓
Lynn--Enacts: What is “supposed to happen” with one card, using Tori as the teammate
              Picks up card, looks at it, holds it to chest, puts it in game box
```
Lynn--Asks: What happens next in the sequence
Points to Mary
Sara--Repeats earlier point: You get one and the cards drop in order (subordinated by Lynn)
IT DROP DROP
Mary--Answers: the cards drop in order

Notice, Sara answers Tori’s original question in the first available discursive slot, when Sara produces the elaborate gesture string (IT DROP DROP DROP). And though Tori signals uptake and comprehension of the answer, Sara’s response is subordinated by Lynn and Mary who engage in a series of turns that ultimately obfuscate Tori’s question. Lynn tangentially describes what is supposed to happen with one of the cards but reaches an impasse when she faces the next sequence of events (“What I don’t know is-” <points to and looks at game box>). Lynn asks Mary what happens next instead of asking Sara (who has played the game before and already said what happens next). Sara tries to tell Lynn the sequence again, but Lynn only peripherally attends, presumably waiting for the authoritative voice of the rule-reader (Mary) to provide the answer. Finally, Mary provides an answer that only indirectly addresses Tori’s question. So, when she ultimately provides the much anticipated response, Mary directs the citing gesture to the original requestor (Tori) even though the request itself underwent at least one revision by Mary and Lynn throughout the course of the exchange. Mary’s response only provides one additional detail that Sara’s contribution did not make: that on a correct guess, the gesturer (not the guesser) must grab the card. Otherwise, Sara’s original answer (IT DROP DROP DROP) provided all of the information Mary’s answer does here, only without the associated authority that the rules carry with them.
These negotiations of authority through composite utterances (i.e., both speech and the body) contextualize the exchange (Bauman & Briggs, 1990) in perceptible ways. Five minutes later, Mary pulls from her subsequent instruction-oriented stance by mocking it with a performance through constructed action where she shakes the instructions and authoritatively says “Listen to the rules!” Even though she never verbally compels her friends to obey that authority, her discursive body (Yerian, 2000) has. The stance Mary constructs--primarily through meaningful movements of her body--situates the meaning behind the deictic gesture to Tori. Even Mary holding the instructions for an extended period of time is a clear indication of how participants not only perceive but also semiotically interpret nonverbal behaviors. The extended holding (in addition to other markers) helps to construct Mary’s stance. Without the information about the holding, these other layers are not fully comprehensible.

The kind of interactional work these ladies engage in during this speech event triggers a laminated space wherein interactants project their relative knowledge (or ignorance) of the game through their bodies. Mary is often not speaking as herself, rather, she is animating (Goffman, 1981) the rules of the game. By proxy, she imports the authority that the rules carry with them (cf. Raymond & Heritage, 2006) and asserts her knowledge (through her utterances, through her gestures) into the activity space. Holding the instructions is clearly not a part of language but pointing to interlocutors and depicting semantic elements of an action skirt the boundary between non-linguistic and linguistic. Interpreting these components as semiotic fields contributing to utterances that are themselves inherently composite, relieves us of the burden of having to parse these symbolic articulators into two compositionally disparate
systems. The approach provides a complete account of the array of symbols interactants fluidly employ during conversation.

5.6 Conclusion

The sort of discourse I highlight in this chapter centered around specific tasks. First, when participants collected pseudonyms and pizza orders, I discussed how gesture (e.g., manual forms and eye gaze) signaled the transfer of speakership rights to targeted addressees. I argued that these corporal moves also positioned the speaker as in charge of running that portion of the exchange. Speakers used their bodies to structure the discourse on the exchange plane (where turns are managed) and the participation framework (where stances are marked). That is, gesture was shaped by but also helped shape the interaction.

I then shifted attention to portions of both discourses where participants engaged with the game box. In the hearing group, I indicated the clear yet unspoken division between participants as Mary and Lynn explained the game to Sara and Tori. Gesture in this slice of discourse contributed propositional content (recall, Sara’s gesture phrase IT DROP DROP DROP and Lynn’s reenactment of the sequence of turns) but it also contributed to discourse coherence (e.g., Sara’s rephrasing of the spoken/gestured utterance and Lynn’s point to her hypothetical teammate while saying her rather than you). In the deaf group, I discussed how participants shift their utterances in space to accommodate the presence of the game box. I brought attention to how multiple articulators are not only fully implicated in utterance creation but also seamlessly switch between producing so-called “gestural” and “linguistic” content. Parsing gesture from sign at this level of analysis is not useful especially given that the interactants respond to the
discourse as it is produced as a whole. Unlike during game play where participants clearly orient to the shift from a “gesturing” frame to a “conversing” frame, here, participants intermix the two with little if any awareness that they are systematically creating discourses through their bodies. The participants do not respond averagely to utterances that are produced with so little conventionalized forms as ungrammatical or marked in any way.

The gestural moves in both groups were not ancillary to the speech (or sign) stream but fully integrated with it, facilitating participants’ navigation through articulating propositions, managing turns, signaling stances, and giving/receiving instructions. These data echo Peirce’s work:

"[A]fter an ordinary conversation, a wonderfully perfect kind of sign-functioning, one knows what information or suggestion has been conveyed, but will be utterly unable to say in what words it was conveyed, and often will think it was conveyed in words, when in fact it was only conveyed in tones or in facial expressions. (MS 283:130-131)” (cited in Parmentier, 1987: 31).

I closed the chapter with an analysis of stance taking during an exchange that was primarily oriented to deciphering the sequence of a turn-at-play. I specifically looked at a deictic point to one participant (Tori) produced without speech, whose function was to cite a contribution made several minutes earlier by said participant. To uncover the meaning of that deictic, we had to track the progression of speech acts beginning with a request to the group and ending with a response from the instruction-reader (Mary). I discussed how Mary’s stance as rule-reader influenced her interlocutors’ treatment of contributions from others (i.e., Sara) who were not endowed with such authority. Gesture contributed both to the creation of this exchange and to the reification of Mary’s stance.
Structuralist views of language (e.g., Chomsky, 1981) as well as McNeillean approaches to gesture (which, I have argued, describe language in structuralist terms) are typically concerned with units that convey propositional content on the ideational plane of discourse. But as I have pointed out here, language in context performs work beyond message transmission and reception. Gesture is fully implicated in these acts as well. As tasks shift, participants alter their gesture and their speech/sign to suit the context.

In the next chapter, I examine in greater detail a specific set of gestures that orient toward the relationship between speaker and addressee, conveying information about the interlocutors’ respective stances, their shifting positions in relation to each other and to the talk. These forms, I argue, can and do function as utterances produced as part of a linguistic code regardless of modality.
6.1 Introduction

By now I have examined gesture as it emerges in two distinct (yet connected) discursive contexts: during game play when interlocutors juggle performing a clue with reaching common ground (Chapter 4) and during task-based exchanges when interlocutors manage turns, represent action, and mark stance (Chapter 5). I have framed my analysis according to a Peircean semiotic where the progressivity of signs accounts for how interlocutors transform visible configurations of the body and materials from the surround into symbolic units. I have also applied a sociolinguistic approach to understanding discourse in interaction by situating my analysis of these forms in their interactive context—examining forms for how they are affected by and also affect context. I have made explicit my claim that gesture need not be relegated paralinguistic status simply because it is executed through the body. Participants in both language groups integrate semiotic resources from all available articulators to construct composite utterances (Enfield, 2009) based on interactive demands.

In this chapter, I take my argument for integrating gesture and language one step further focusing specifically on stance taking and the embodied forms that elaborate stance utterances. I hone in on two distinct phenomena that emerge in both data sets: gestural mimicry (and a
subclass *gestural mirroring*) and the Open Hand Palm Up gesture \(^{33}\) (and its related variant the Gun Handshape Palm Up gesture). I address each of these in two separate sections, followed by a discussion of how they both serve as symbolic resources implicated in stance taking. I frame my argument by first addressing the broader notion of repetition in discourse and its connection to stance acts in general. Here, I discuss gestural mimicry and mirroring as acts that resemble the alignment and resonance components of Du Bois’ (2007) stance triangle. To illustrate how Peirce’s semiotic applies to this analysis, I talk about mimicry and mirroring during game play as instances where iconic and indexical dimensions are foregrounded, then examine the manual gestures as composite utterances in their own right that mark a speaker’s stance (making the symbolic dimension most explicit). In the second half of the chapter, I turn to the Open Hand Palm Up form as operating as a discourse marker. I review how verbal discourse markers are known to cohere talk and “anchor” interlocutors in stances (Schiffrin, 1987). I apply Peirce’s semiotic again to these forms, first examining their use in game play then in conversation to highlight one of the shifts that occurs as interlocutors exploit visible articulators for symbolic purposes.

Gestural mimicry/mirroring and the Open Hand Palm Up gesture, though distinct in form, make manifest participants’ orientation to the participation framework and carry no (or little) propositional content. Both have been broadly categorized as contributing to discourse coherence (e.g., Kimbara, 2006; Cienki & Müller, 2008; Müller, 2004) and marking interactional phenomena (e.g., Roush 2007; Hoza 2007). In this chapter, I make the connection

\(^{33}\) Several names of this form have been used in the literature: e.g., Kendon (2004) calls it the Open Hand Supine, Müller (2004) calls it the Palm Up Open Hand (PUOH), and Ferré (2011) calls it the Open-Palm Hand. In the sign language literature, it is often glossed WELL (e.g., Hoza 2007, 2011) but is also referred to as 5HSPU by Roush (1999, 2007). I will refer to it as Open Hand Palm Up throughout for consistency purposes.
more explicit by talking about these aspects of embodied utterances as part of language proper.

To fully capture what they contribute to discourse—indeed, to see them at all—we must consider them as fully integrated in linguistic utterances in situ.

6.2 Background: Gestural mimicry and mirroring

Repetition is a naturally occurring phenomenon in interaction (Tannen, 1987) that (among other things) contributes to discourse coherence and signals affiliation across speakers. For example, when Mary starts to construct an utterance about the operation of the game box but drops off mid-stream. Sara continues the trajectory of Mary’s proposition by repeating part of her utterance:

Mary  So I guess you -
Sara  I guess you get one..Oh! You get one and you just keep droppin’ ‘em.

Both women are looking at the game box when these utterances are produced. Sara repeats the syntactic structure of Mary’s utterance thus completing the idea unit and contributing to the coherence of the discourse as part of the overall interaction. This example shows how communicative resources (speech, in this case), once introduced to the interaction, are open for re-use by others. By analyzing which components of the first utterance the speaker of the second pair part selects (Clark & Gerrig, 1990), we also gain insight into what that speaker is interpreting as interactively meaningful.

Repetition does not only cohere adjacent utterances to each other; it can also be implicated in creating resonance across interlocutors as part of a stance act (Du Bois, 2007; Kärkkäinen, 2006). Du Bois (2007) reframes stance as a “triune” act whereby a stance taker evaluates or positions an object of stance in response to another stance taker’s evaluation or
positioning of the same object of stance. Thus, stance takers align (in convergent or divergent
directions) with each other, modifying their evaluations through verbal and (as will be shown
here) nonverbal means. Du Bois uses the diagraph as an analytic tool to highlight the syntactic
resonance in utterances as interlocutors co-create stances. The diagraph aligns sequential
utterances in columns to highlight where stance takers converge and/or diverge in their
respective evaluations of some stance object. While Du Bois allows for nonverbal and
“paralinguistic” signs to contribute to stance utterances, the diagraph iconizes the linearity of
spoken words in utterances and presents the challenge of including the co-occurring semiotic
symbols (both verbal and nonverbal) that also contribute to a stance act.34 The type of resonance
I see in my data is a visible instance of such parallelism marked not just by words and syntactic
structures but also the bodies, manual gestures, facial expressions, and intonation, all of which
are incredibly difficult to transcribe.

Interlocutors extract meaning from verbal and gestural signs, reusing them to create more
signs (cf. Peirce’s progressivity of semiosis). Clark & Gerrig’s (1990) selectivity principle
specifically targets this notion that repeating someone else’s discourse necessarily requires the
speaker to select certain aspects of the source to repeat. Kimbara (2006; also Parrill & Kimbara,
2006) coins the term gestural mimicry to refer to this specific instantiation of repetition as also
contributing to discourse coherence. Like they do with speech, interlocutors “extract
meaning” (Kimbara 2006) from each other’s gestures and either repeat or reconfigure the forms
as an “echoic use” (41) of gesture. Aligning with work on language in interaction, Kimbara
found that,

34 Du Bois includes prosodic information in descriptions of the utterances but not within the diagraph proper.
“a given participant's gesture can be contingent upon the gesture of another participant that occurred in the previous discourse. More specifically, in these examples the form-meaning relationship of a given speaker's gesture appears to influence how the interlocutor's gesture is formed when the interlocutor refers to the same topic in subsequent discourse” (41).

Mimicry, then, can occur in local contingencies but also across longer stretches of talk. Kimbara emphasizes the underlying drive behind mimicry is that speakers "perhaps unwittingly...increase the salience of one single mapping relation over other alternatives for their listeners. When the gesture is recognized by the interlocutor who then mimics the gesture, the foregrounded aspects of meaning become also salient in the mind of the interlocutor" (45). Like spoken utterances, then, gesture serves as a resource that is both parseable and re-useable. When viewed from this lens, gesture is not simply meaning transfer but also a transmission of symbolic resources from which interlocutors select aspects to (re)create connected utterances (cf. Clark & Gerrig, 1990).

I refer to gestural mirroring as a specific type of mimicry where an addressee simultaneously reproduces a speaker’s gesture (or elements of the gesture). In the context of game play, mirroring appears to prime the guesser’s processing of the gestured clue as she attempts to reach common ground with her gesturing teammate. It is also an overt signal that the addressee is in tune with her speaker’s communicative endeavor, that is, equally devoted to the task of reaching a correct guess. This attunement makes itself known in instances of mirroring in discourse where, I argue, the behavior becomes abstracted from a literal to symbolic connection between an addressee and a speaker.

Ferrara (1994) describes mirroring and echoing in spoken utterances as two strategic uses of repetition during therapeutic discourse where interactants signal affiliation with each other. Echoing, in her data, involves repetition of the interlocutor’s utterance that “displays solidarity...
and emphatic agreement” (8) while mirroring is more frequently initiated by the therapist as “an indirect request of elaboration” (119, Emphasis in original). Ferrara’s mirroring of spoken utterances is slightly different than the gestural mirroring I analyze in this chapter in that the gestured forms are produced simultaneously as opposed to iteratively (as in Ferrara’s case) and appear to be less a request for elaboration than a signal to continue talking.

What seems closer to a description of the phenomenon I examine comes from Scheflen’s work (1973) where he observes shifts in body positions during interaction as a sort of synchrony: "In rapport, the speaker and listener will often 'synchronize'; i.e., they will sit in the same postures and move synchronously" (53). While Scheflen describes these shifts as synchronous, his data also show these moves happening sequentially (as in one person crosses his legs after which his addressee crosses hers). Nevertheless, the overall effect of gestural mirroring is akin to gestural mimicry, repetition, and verbal echoing and mirroring. Interlocutors respond to the state of engagement by structuring symbolic resources that align verbally and visually with their co-participants. I turn now to examine how these phenomena play out in both language groups.

6.2.1 Mimicry examples

In Figure 6.1, Mary and Lynn discuss where teammates should sit in relation to each other. While all of the women attend to the game space, Mary produces a gun handshape to deictically point back and forth between herself and Lynn (Fig. 6.1). Sara immediately produces the same gun handshape to point back and forth to Mary and Lynn (Fig. 6.2) verbally confirming that they are teammates and will play first.
In another exchange, Mary and Tori co-construct a sequence after completing a turn-at-play. Tori quips if only they had more teammates, “then we could kick some serious boo-tay!” and shakes her Open Hands Palm Up punctuating the words *then, kick*, and *serious* (Fig. 6.3). Mary claps her hands once in response then repeats elements of Tori’s composite utterance. Mary says, “We’d kick our own butts!” and mimics Tori’s Open Hand Palm Up gesture, slightly contracting her fingers and moving them forward and back once (Fig. 6.4).
Tweaking Du Bois’s diagraph to this sequence, we can unpack the paired utterances for what they accomplish discursively and also illuminate what is missing from the tool when we dismiss the visible symbolic resources of the sort animated here.

Tori: **then** we **could kick** some **serious** **boo-tay**!

|---------Open Hands Palm Up-------------------------------------|
|-------drops hands on **then**, **kick**, and **serious**---------|
|--head pulses back & forth with manual movement------|
|------------torso faces Mary-------------------------------|
|----------eye gaze to Mary--------------------------------|

Mary: We ’d kick **our own** **butts**!

|---------Open Hands > Claws------------------|
|--hands alternate forward/back, pulse on **own**, **butts**| |
|------------torso faces Tori------------------|
|----------eye gaze to Tori------------------|
Mary takes elements of Tori’s utterance to recreate her own utterance and in so doing indicates a connection with Tori. She incorporates Tori’s schema “We + modal + kick” and the use of the Open Hand gestures but she also tweaks the utterance, replacing “some serious boo-tay” with “our own butts” (resulting in a parallelism that Tori visibly responds to through eye contact and laughter). The alteration to Tori’s utterance is also physically embodied in the composition of the Open Hands (where Mary slightly bends the fingers, moving them forward and back, instead of up and down). The utterances are jointly constructed and effect laughter from Tori directed to Mary (through eye gaze), thus contributing to an alignment between the two women. These examples show how interlocutors attend to talk and gesture as composite.

6.2.2 Mirroring examples

Mirroring occurs when a current speaker holds the floor and her addressee copies the gestural forms or elements of those forms on-line. The addressee is not crafting a response or signaling a desire to take the floor (as is the case in mimicry). Rather, she is signaling, through her nonverbal behaviors, complete connection with and attention to the current speaker’s talk. Mirroring gestures by the guesser occurs consistently throughout both games especially when a guesser struggles to reach common ground. Mirroring in this context appears to signal affiliation with the gestured performance but also might be serving as a prime for a guess. In this second sense, mirroring functions like a word-searching gesture (Bavelas, 1994) but it is also an indication of the "constant monitoring of others" (Kimbara, 2006: 52) characteristic of face-to-face interaction.
In Figure 6.5, John mirrors the gesture that Tammy performs for the clue “Suitcase” as he struggles to come up with guesses. Both participants are looking at each other; John is watching Tammy’s performance and Tammy is watching John for a guess. John takes several passes (and reiterations of the mirrored gesture) before correctly guessing.

![Figure 6.5: John mirrors Tammy’s gesture](image1)

In Figure 6.6, Jane performs “Match” for Todd by signing MATCH (as in “strike a match”). Todd mirrors the sign, drawing his right hand up across his palm (Fig. 6.7) then quickly spells #MATCH. Jane’s eye gaze shifts from contact with Todd to his hand to see what he is spelling.

![Figure 6.6: Jane performs “Match” Todd mirrors the sign MATCH](image2)
Figure 6.7: Todd completes the mirrored form before spelling #MATCH

Mirroring is not confined to manual gestures. Here, Sara mirrors Lynn’s torso sway during her performance of the clue “Moose” (Fig. 6.8). When Lynn moves her torso to the left, Sara moves her torso to the right (literally) mirroring the movement. As Lynn swings her torso back to the right, Sara sways her torso to the left (Fig. 6.9).

Figure 6.8: Lynn performs “Moose”, Sara mirrors the torso lean

Figure 6.9: Sara mirrors Lynn’s torso sway
In Figure 6.10, Mary mirrors Lynn’s performance of the clue “Bowl”. Lynn leans over the space between them as Mary also leans in and produces the same cupped hand gesture. Mary looks at Lynn’s hands while producing her own mirrored form.

Figure 6.10: Mary mirrors Lynn’s performance of “Bowl”

In the sequence of gestures Tori produced while performing the clue “Deodorant” (see Chapter 4) Mary raises and lowers her elbows multiple times throughout her string of incorrect guesses (reproduced here in Fig. 6.11). Mary raises her elbows most dramatically as time runs out.

Figure 6.11: Tori continues form lowers head; Mary raises right elbow

In this context, when guesser and gesturer are highly aligned in their interactive goal (not to mention visually affixed), mirroring is primarily executed for the guesser since her sole communicative purpose is to provide a correct guess of the performed clue (not to assist the
gesturer in performing it). These movements are not the focus of anyone else’s attention, necessarily, and are clearly not carrying communicative burden like those of the gesturing teammate. However, they do index the explicit effort the guesser is making to cooperate (and thus align with) the teammate’s communicative endeavor. It is this core meaning behind the move that I would like to suggest is abstracted in instances of ordinary discourse where we see it functioning as part of a composite array of signs in stance utterances.

When mirroring emerges in discourse its function expands beyond the concrete goal of reaching a correct guess to an abstract goal of reaching alignment. Whereas in the game, we see very clearly that mirroring serves a practical purpose--to prime the guesser to process the gesture, reach mutual understanding and guess the correct clue--this behavior becomes distinctly interpersonal in conversation.

Before engaging in a lengthier discussion of mirroring in sign discourse, I turn first to illustrate an example from the spoken data where Mary expresses frustration after having barely missed a clue. She shakes her hands in the shape of claws in front of her (Fig. 6.12) while Tori, her teammate, mirrors her manual and nonmanual gestures (including her intonation).

Figure 6.12: Tori mirrors Mary’s gestures expressing frustration

In the example above, Tori mirrors Mary not to mock but to signal alignment with her. Tori thus positions herself as a cooperative participant and supportive interlocutor through these verbal
and nonverbal signals. The shift in function from gestural mirroring during game play to
gestural mirroring during conversation is analogous to the progressivity of Peirce’s semiotic.
That is, concrete behaviors (whose Firsts are foregrounded) transform into complex symbolic
units (whose Seconds and Thirds are foregrounded) as interlocutors reinsert symbolic uses of
their body in reinvented ways.

6.2.3 Discourse analysis of mirroring in sign discourse
Mirroring occurs far more frequently in the conversation portions of the deaf group (i.e., outside
the game frame) likely due to the “constant monitoring” required of addressees in sign
discourse. The interactive effect is the same here: an addressee mirrors a speaker’s embodied
utterances to signal alignment with the speaker. A clear example of this occurs during the
interaction between Todd and John as they discuss eating meat (first analyzed in Chapter 5).
Recall that John had positioned himself as a sympathetic and attentive interlocutor, asking Todd
for clarification about the physiological effects of eating meat. I previously observed the ways
Todd signaled his cooperative stance by altering utterances to suit John’s question and clarifying
a misinterpretation of Todd’s original point. In this section, I shift attention to John’s behaviors
as the addressee receiving Todd’s input. John selectively mirrors parts of Todd’s talk as a way of
expressing attention to and solidarity with his friend.

John asked Todd if he felt stronger after he ate meat and Todd replied “NO+ LESS”.
John repeats Todd’s sign LESS while tilting his head back nodding once (Fig. 6.13). This is an
example of repetition (or gestural mimicry) defined earlier in this chapter. In the following
string of utterances, John’s facial expressions and torso moves start to mirror Todd’s.
Figure 6.13: Todd waves hand, shakes head and mouths ‘no’

Todd initiates the topicalized portion of his next phrase: “#WHEN HAVE MEAT?” “When I eat meat” (Fig. 6.14) where he directs his torso and head to his right (this space becomes reserved for utterances referring to eating meat), gazes in his own sign space, and raises his eyebrows. By the time Todd signs MEAT (note, with his eyebrows still raised), John has also raised his eyebrows and tilted his torso and head to his right (Fig. 6.14).

Figure 6.14: John mirrors Todd’s raised brows and torso tilt

We know that John is not expressing surprise (which would also be marked by raised eyebrows) because Todd has just begun to construct the utterance: the second part of his conditional phrase has not yet been produced, thus there is no new information about which John would be surprised. As Todd completes the conditional phrase “#STIFF” “I get stiff” (Fig. 6.15), he returns his gaze to John, shifts his torso to neutral position while clenching his teeth and
lowering his brows to display discomfort. Simultaneously, John moves back to neutral space and lowers his brows, completing the mirrored conditional phrase.\textsuperscript{35}

Figure 6.15: John receives Todd’s message depicting his stiff body after eating meat

Like we saw earlier when Sara mirrored Lynn’s torso sway while gesturing the clue “Moose”, John mirrors only the nonmanual elements of Todd’s utterance, not his manual signs. As Todd elaborates on the stiffness he feels in his upper body (by putting both claw handshapes on his chest, clenching his teeth and lowering his brows), John’s brows lower even more (Fig. 6.16).

Figure 6.16: John lowers brows further in response to Todd’s second depiction of stiffness

John maintains lowered brows throughout the next string of Todd’s signs (Figure 6.17) and though the image does not show this clearly, he also bends his middle finger as Todd signs

\textsuperscript{35} Typically, conditional clauses attract more mirroring than any other, I do not explore this further here but future research might examine if this observation rings true.
FEEL (mirroring the handshape of the sign FEEL where the bent middle finger brushes the chest).

Figure 6.17: John lowers brows and bends middle finger as Todd signs ..SAME ME FEEL..

John does not mirror every movement his interlocutor makes; he shifts between producing his own responses (in this case, commiserating with Todd’s pain through lowered brows) and producing gestural forms that are not his own (which we have seen in the mirrored conditional phrase in Figs. 6.14 & 6.15). These moves mark affiliation with his interlocutor. They signal connection to and comprehension of the message but not for the message’s content (as was the case during game play), but for its interactive meaning. Mirroring during turns-at-play, because of the slots they emerged in, are clear examples of guessers searching for correct clues; mirroring signals a teammate’s attunement to the gestured propositions and more broadly the frame of cooperative game play. In regular conversation, however, mirroring signals attunement to the discourse but more specifically to the speaker constructing that discourse. In this way, the moves align a “silent” addressee with his speaker without having to say anything (cf. Bauman & Briggs, 1990:70).

To summarize, mimicking and mirroring are not parodies of an interlocutor’s behavior. Rather, they are responses to and reintegrations of meaningful body behaviors in unfolding talk.
as part of the development of “shared image construal” (Kimbara, 2006: 45). Addressees extract meaning from their interlocutors’ discourse to signal their own comprehension of and attunement to the message. Mirroring does not occur constantly throughout the discourse—that would result in a highly awkward exchange. It emerges consistently, though, in places where participants are signaling alignment through complete attention to and comprehension of an interlocutor’s talk. This is one of the sophisticated ways people use language (cf., Tannen’s repetition) for interpersonal ends. That interactants orient to behaviors of the body in the same way and for the same purpose in conversation indicates to me that gesture is more central to stance taking than typically allowed.

The notion that stance can be made manifest through the body provides additional evidence for analysts who are looking at stance to pinpoint exactly what a person is taking stance in reference to. By widening the analysis beyond verbally-produced linguistic utterances to include composite utterances, we are able to see that participants in fact signal stance through a complex array of semiotic resources. If we are not expressly looking at these semiotic resources, then we are overlooking the potential of systematicity exhibited by them. We have not yet reached the point of gathering composite utterances as a regular practice when analyzing spoken discourse. As a result, we lack a broader corpus of data concerning how composite utterances contribute to stance taking (not to mention other interactive practices) simply because most analysts embodied markers are not typically considered to be full-fledged components of spoken language.

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36 It seems likely (though we have no way of knowing without more research) that gestural mirroring is an external manifestation of mirror neurons and the internal cognitive process whereby recipients of a message decode the information as if they are producing the message themselves. I do not wish to address mirror neurons in depth here. There is a large body of research documenting their relationship to communication and the evolution of language. I refer the reader to Fogassi and Ferrari (2007) for a good overview.
In the next section, I apply the same line of thinking explored here to the Open Hand Palm Up and Gun Handshape Palm Up forms to demonstrate the ways in which more concrete correspondences between form and function become abstracted (ad hoc) to signal higher level interpersonal connections. I analyze these forms as symbols that, like words, function as "pre-fabricated semiotic processes" (Enfield, 2009:16) that shift from metaphorically delivering information to marking stance.

6.3 Background: Open Hand Palm Up as Discourse Marker

The Open Hand Palm Up is generally viewed as a word in ASL (notably labeled “inherited” (Hoza, 2011) from co-speech gesture) and because it emerges ubiquitously in the same way in spoken discourse, I propose we treat it as a discourse marker with linguistic status in spoken language, just as we do in sign. Before going further with this claim and examining the evidence to support it, I begin by reviewing the role discourse markers play in language more broadly.

Enfield (2009) describes buoy-like gestures in symmetry-dominance constructions where a speaker produces a two-handed gesture and holds one of the hands to act upon it with a subsequent gesture. He characterizes the buoyed gestures as,

“a kind of enchronic glue, inhabiting a structural position in the temporally ordered supply of information not only within single moves but also across moves in a discourse trajectory. By formally linking a new composite utterance with a preceding one, a gesture hold affords a coherent way to explicitly represent two related ideas at the same time" (146).

The Open Hand Palm Up and Gun Handshape Palm Up are typically co-expressed with other semiotic fields, including the other hand. They function in much the same way Enfield describes
here, “gluing” together utterances and also participants. But rather than one hand acting upon
the other, in this case, the forms prompt or signal *evaluation* of the other.

Discourse markers serve a similar function (Schiffrin, 1987). Schiffrin (1987) specifically
examines *well* as a signal of the participation framework that “anchors a speaker into an
interaction as a respondent” (316). *Well* typically marks a shift in an unexpected course in
relation to a projected track uttered prior to it. It is no surprise that the Open Hand Palm Up
gesture in ASL is frequently glossed WELL, as it too emerges frequently in response to a prior
intonation unit. Roush (1999, 2007) and Hoza (2011) have identified the form as a politeness
marker in ASL. Hoza found that it works as a hedge during rejection statements. Roush (2007)
also found that the form functions to solicit another’s opinion, signal agreement with another, or
mitigate face threats by qualifying a statement (as in, “what can I say”). The same gesture
emerges in spoken discourse. Ferré (2011) observes that when the Open Hand Palm Up is
produced with a hand flip it is “equivalent to adding a question-tag to the utterance … adding a
certain degree of uncertainty to the statement” (2011: 3). She also found that the gesture can
function as a discourse parser, segmenting talk into broader discourse units and (crucially)
marking modality.

Discourse markers, like *well*, signal footing shifts and mark a speaker’s stance as talk
unfolds. Much more attention has been paid to the verbal dimension of stance acts. Kärkkäinen
(2006: 705), for instance, notes how pervasive epistemic stance markers (such as *I think, I don’t
know, I guess*) are in conversational interaction in particular. As interlocutors, we modify our
emergent meaning to suit the characteristics of the person(s) with whom we interact. Stance,
then, becomes an *interactive activity* that emerges as a result of joint engagement in evaluative
The notion that stance taking is an embodied act has been furthered by Goodwin (2007) and Kockelman (2005).

That stance is a joint activity (a view shared by Du Bois (2007) in his stance triangle) evokes the idea that the act is visible, tangible, physically embodied. While Du Bois and Kärkkäinen focus on verbally articulated markers of stance, in this chapter (in the spirit of Goodwin and Kockelman) I bring attention to the embodied nature of stance and the moves that align participants with each other as a body engaged in relation to another body. The Open Hand Palm Up and Gun Handshape Palm Up pattern like epistemic markers. They are composite in the sense that they are coupled with other semiotic signals (like movement, eye gaze, brow raises, mouth configurations) that provide information about how the speaker evaluates the stance object. These forms typically occur at the beginning or end of intonation units and, like their verbal counterparts, “prepare the recipient to align themselves to the upcoming contentious or evaluatively loaded message” (Kärkkäinen, 2006:708). In my data, the messages are more frequently evaluatively loaded than contentious but they are marked just the same.

The Open Hand Palm Up gesture has been shown to convey metaphorical meaning. Kendon (2004) discusses the variety of instantiations the gesture can take in terms of a family of gestures called the “Open Hand Supine (palm up)” or OHS Family. He documents several sentential contexts in which these forms emerge and observes that overall, the Open Hand Palm Up forms “are united by the common semantic themes of presenting and being ready for receiving” information (210).

It quickly became apparent when looking at my data that the base form can have several variants (the Gun Handshape Palm Up being the most marked, in addition to differences in
movement and location of production). In order to parse out the forms and respective interactive functions, I examined how each instance was contextualized in an utterance that was part of a turn which was part of a larger exchange structure and participation framework. But there is also evidence that the forms undergo semiotic processes whereby different dimensions of the triadic relation (Peirce, 1955) becomes foregrounded based on a speaker’s interactive intent. In the next section, I review the forms first as they emerge as classic interactive forms where the qualities of Firstness and Secondness are foregrounded. I then present examples when produced in stance utterances where their Thirdness comes to the fore (Peirce, 1955).

6.3.1 Open Hand Palm Up as classic interactive gesture

In this section, I compare the Open Hand Palm Up form when it is used as one of Bavelas’ (1994) four interactive gestures: Delivery, Citing, Seeking, and Turn-Regulating. Sometimes the gesture accomplishes two or more of these functions. I call attention to how closely the form’s physical composition aligns with “presenting and being ready for receiving” information (Kendon, 2004: 210) thus describing the quality of the gesture’s Firstness and Secondness.

The first example reveals this iconicity and indexicality when Lynn uses the Open Hand Palm Up while delivering new information to her teammate (Fig. 6.18). Lynn has just finished gesturing the clue “hurt” for Sara, who does not correctly guess in time. Once the timer runs out, Lynn bends toward Sara, lowers both Open Hands Palm Up in space and yells, “Hurt!”
Figure 6.18: Lynn uses Open Hands Palm Up to tell Sara the clue she just missed

The Open Hand Palm Up forms here effectively say to Sara, “See? That was what I was trying to tell you!” marking the utterance as new information (cf. Bavelas, 1994; Table 6.1) and delivering it to her teammate, but also calling attention to the discursive relation between Lynn and Sara that is a product of the game frame wherein the value of Sara’s contribution is given more weight than the others.

Table 6.1: General delivery gesture (adapted from Bavelas, 1994)

<table>
<thead>
<tr>
<th>Type</th>
<th>Function</th>
<th>Verbal paraphrase</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>Marks relationship between speaker and addressee, speaker “hands over” new information.</td>
<td>“Here’s my point”</td>
</tr>
</tbody>
</table>

The next example comes from the deaf group. After Tammy missed the clue “fish” that John performed, Jane looks at Tammy and says “FISH! Open Hand Palm Up” (Figure 6.19).

Figure 6.19: Jane just said FISH! Open Hand Palm Up
Notice, Jane’s mouth retains the “SH” formation from her recent co-occurring manual articulation of FISH, while her hand changes to an Open Hand Palm Up. She also sustains eye contact with Tammy here, which contributes an additional semiotic field signaling evaluation of the prior talk.

In Figure 6.20, we see Lynn citing Sara’s prior talk by pointing her Open Hand Palm Up in Sara’s direction. From the pairing of this gesture with the verbal “yea” we can infer that the gesture is visually linking Lynn’s talk to Sara’s prior turn. Rather than verbally saying “Yea, I agree with you”, Lynn is able to verbally elide the evaluative component while gesturally relaying the same intent.

![Figure 6.20: “Yea (Open Hand Palm Up) It was either healthy or winner”](image)

We saw a similar example of this in Chapter 4 when Lynn marked Sara’s previous turn by moving her Open Hand Palm Up gesture toward Sara while saying “That’s what’s nice” (Fig. 6.21).
Instead of saying “I agree with what you just said, Sara. That’s what’s nice”, Lynn is able to convey the pragmatic act of alignment through the manual gesture while co-expressing an evaluation of Sara’s talk with her verbal utterance.

Jane uses the form in the same way in Figure 6.22, where she cites Todd’s idea for a performance gesture of the clue “grass”. Todd is showing Tammy the gesture and at the same time, Jane cites that gesture while gazing at Tammy and slightly opening her mouth (Fig. 6.22).

The form accomplishes several interactive tasks here: it cites discourse (Todd’s) while including a third interactant (Tammy) and also presents an evaluation of Todd’s idea (by Jane with her open mouth and head tilted back). The distinction between a gesture that cites or delivers can be uncovered, in addition to contextual clues, by examining its placement in sign space: a citing
gesture tends to be placed further outside the speaker’s sign space, indexing the person being cited, whereas a delivery gesture is typically closer to the signer’s body. In each case, it is the array of semiotic features combined that create the evaluative effect.

The gesture can also be used as a turn-regulator. Baker (1977) identifies the form as a turn-initiation gesture in her data, much like the Open Hand Palm Up that Jane directs to John in Figure 6.23 to return the floor to him.

![Figure 6.23: Jane returns John the floor with Open Hand Palm Up](image)

Finally, the form can be used as a seeking gesture where the interlocutor (in this case, Tammy) seeks input from her addressee (Jane) in regards to a specific point. Here, Tammy has just asked if Jane wants to read the instructions now (Fig. 6.24).

![Figure 6.24: Tammy asks Jane if she wants to read the rules](image)
At its core, this form visually conveys a transfer, receipt, or citation of talk. We might say that the iconic relation of the open palm inherent in the form is metaphorically tied to the concept of manipulating a physical object in one’s hand. The gesture indexes other interlocutors’ talk as well as the speaker’s own signs. Participants do not respond consciously to this form but they do respond in unmarked ways showing that the form is a part of the symbolic repertoire of both groups. Now that we have seen examples of the Open Hand Palm Up when used as a classic interactive gesture, I turn to examine how interactants use it in a longer stretch of talk.

6.3.2 Discourse analysis of Open Hand Palm Up in spoken discourse

Speakers alter the Open Hand Palm Up in a variety of ways (e.g., its movement, location, and co-occurring facial expressions) that reveal different aspects of a speaker’s stance act. For instance, by moving the Open Hand Palm Up toward an addressee while opening her mouth and nodding her head, a speaker signals agreement with her addressee’s prior talk. I examine next a series of turns during game play where both guesser and gesturer use the Open Hand Palm Up as they work together to reach common ground.

In this eighteen second exchange, Lynn gestures the clue “Hot Dog” for her teammate Mary. It is the last of four clues Lynn performs so time is starting to run out. Lynn begins the turn already pressed for time and unsure of how to perform the clue, which prompts the use of the Open Hands Palm Up seeking form. Mary makes a concerted effort throughout the turn to grasp the clue, using a variety of Open Hand Palm Up gestures. [Note: I use two columns in this transcript to show the overlap that occurs between participants. Gestures that are co-expressed with speech and are noted on separate lines in italics under the same line number].
<table>
<thead>
<tr>
<th></th>
<th>Lynn</th>
<th></th>
<th>Mary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Oh no! Umm.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>→</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Lynn</td>
<td>Brings supine crescent hands to mouth, Then drops hands, exasperated NMS</td>
<td></td>
</tr>
</tbody>
</table>
| 3 | Lynn | [ Raises Open Hands Palm Up short jolt in space while planning next move | Mary | ] Trumpet. Uh something blowing:  
| 4 | Lynn | Supine crescent hands to MO, bites down | Mary | Uh something you're drinking.  
| 5 | Lynn | LH crescent HS, RH key HS glides above LH | Mary | A sandwich! a hoagie a subway  
| 6 | Lynn | cupped hands again to MO, bites & chews, tilts torso toward Mary head jerks down while biting | Mary | a sub-sandwich:. A pastrami sandwich.  
| 7 | Lynn | hhhhh | Mary | A sandwich?  
|  |      | Drops hands, bends over |  | Open Hands Palm Up to Lynn, head shirks, brows raise on “A sandwich?”  
| 8 | Lynn | Brings hands up, thinking what to do, leans head back laughing | Mary | ..A::Something you're eating!...Uh.  
|  | Lynn | Um |  | Open Hands Palm Up drawn up to head then drop out to Su  
| 9 | Lynn | Ring HSs draw apart <hums almost> | Mary | Holds Open Hands Palm Up in space  
| 10 | Lynn | L Ring HS over R index, raises up several times | Mary | Uh.  
| 11 | Lynn |        | Mary | Holds Open Hands Palm Up in position in space  
| 12 | Lynn |       |  |  
| 13 | Lynn | Holds index upright | Mary | A donut!  
|  |      | HHHhhhhh |  | Extends fingers of Open Hands Palm Up on “donut”  
| 14 | Lynn | Shifts index to horizontal position | Mary | A donut!  

---

**“Hot Dog” example, Hearing group (13:18-13:36)**
“Hot Dog” example, Hearing group (13:18-13:36)

<table>
<thead>
<tr>
<th></th>
<th>Lynn</th>
<th>Gesture Description</th>
<th>Mary</th>
<th>Gesture Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Lynn</td>
<td>Drops hands bends over, laughing</td>
<td>Mary</td>
<td>Mimics Lynn’s Index HS gesture, moves RtL</td>
</tr>
<tr>
<td>16</td>
<td>Lynn</td>
<td>Hands between legs laughing</td>
<td>Mary</td>
<td>Something that has a hole! hhh</td>
</tr>
<tr>
<td>17</td>
<td>Lynn</td>
<td>Torso upright, raises both hands in gesture space, Open Hands Palm Up raise up</td>
<td>Mary</td>
<td>Rh gun handshape palm up, lh Open Hand Palm Up toward gesture space</td>
</tr>
<tr>
<td>18</td>
<td>Lynn</td>
<td>Open Hands Palm Up drop in space</td>
<td>Mary</td>
<td>A hot dog!</td>
</tr>
<tr>
<td>19</td>
<td>Lynn</td>
<td>Claps hands bends over</td>
<td>Mary</td>
<td>Open Hands Palm Up drop in space</td>
</tr>
<tr>
<td>20</td>
<td>Lynn</td>
<td>YES!</td>
<td>Mary</td>
<td>Drops hands to side, leans back into couch laughing</td>
</tr>
</tbody>
</table>

Lynn begins her turn looking at the card and saying “Oh no!” then drops both Open Hands Palm Up in space and looks up to the ceiling as she considers how to perform the clue (Fig. 6.25).

Figure 6.25: “Oh no! Um”

The Open Hand Palm Up gestures in this turn do not move toward Mary so we know it is not presenting information to Mary per se (though Lynn knows Mary is watching her). The closest interactive move this gesture makes is to Bavelas’ seeking gesture (Table 6.2), where a speaker seeks help in retrieving a word or phrase, only in this case, the speaker essentially seeks help retrieving a gestured utterance from herself.
Lynn shifts to profile position and brings two crescent handshapes to her mouth acting as if she is eating a hot dog and then sprinkling toppings over it. Mary utters guesses in a list intonation: “Trumpet. Uh something blowing: Uh something you're drinking. A sandwich, a hoagie, a subway, a sub-sandwich:. A pastrami sandwich. A sandwich?” When she repeats “A sandwich?” as a question Mary raises both Open Hand Palm Up gestures, presenting the right hand closer to Lynn in gesture space, while raising her shoulders and her eyebrows (Fig. 6.26).

The net effect of these manual and nonmanual signs is both delivery and seeking based on the movement toward Lynn in space (delivering the guess) as well as Mary’s raised eyebrows which signal a Yes/No question (seeking Lynn’s confirmation). Lynn responds by laughing and bending over so Mary knows her guesses were incorrect. Mary then raises her open hands to her face while saying “A::” (much like Lynn did earlier in line 2) then drops them in space as she utters her next guess “Something you’re eating!” (Fig. 6.27 A&B).
This instance visibly delivers the guess to Lynn through the Open Hand Palm Up gesture while also visibly seeking Lynn’s confirmation of the guess with her raised eyebrows.

In response to all of Mary’s missed guesses, Lynn produces a new gestured form where she outlines the shape of a hot dog (a cylindrical shape, depicted by drawing apart two ring handshapes). Mary leaves her Open Hands Palm Up in space while Lynn produces this gesture thereby signaling her ongoing attention to and connection with her teammate (cf. Jane holding the numbers ONE and TWO while collecting pizza orders in Chapter 5). Mary marks her continued attention to the exchange, effectively leaving herself open to receiving more information and taking another turn. The gesture is coupled with the verbal filler “uh”. Mary then guesses “A donut!” and flips an Open Hand Palm Up simultaneously (Fig. 6.28).
The addition of the wrist flip (which I examine in more depth in the next section) evaluatively marks Mary’s reservation about her guess. In regular conversation, the form contributes to stance utterances that highlight the evaluative component of a stance act.

Mary’s guess is incorrect and Lynn and Tori begin to laugh hysterically, which seems to catch Mary off guard. We know that Mary expected her guess to be right because she essentially reproduces her thought process in the next string of utterances. She says, “Something that has a hole!” while moving her gun handshape horizontally from right to left (Fig. 6.29), mimicking the gesture Lynn just made one second prior, then presenting her Open Hands Palm Up in space (Fig. 6.30).

![Figure 6.29: “Something that has a hole!”](image1)  ![Figure 6.30: <SEE?> Open Hand Palm Up](image2)

The repetition of Lynn’s performance gesture, which Mary produces using the gun handshape moving from right to left, followed by the Open Hand Palm Up exhibits the process of assimilation we see in ASL where the right handshape of Mary’s repetition of Lynn’s gesture is retained in the handshape of the immediately subsequent Open Hand Palm Up. The result is a phonological assimilation of the handshape between gestured forms that links the two together in a phrase. This pairing essentially means [gestured glosses are capitalized, inferred meaning is in italics, verbally uttered phrases in quotes]: “INDEX-FINGER-MOVING-TO-THE-RIGHT / interpreted to mean “Something that has a hole!” SEE?”. Mary holds the last form in space,
visibly presenting her most recent contribution to Lynn while waiting to see what Lynn does next. So, Mary extracts a semiotic resource provided to her through her interlocutor, reproduces it in her own space and embeds it into a composite utterance (with her Open Hand Palm Up and co-occurring facial expressions) where she evaluates the performed form manifesting her due diligence in working toward common ground. The form that Mary repeats also becomes inserted in a gesture phrase, essentially identical to Jane’s production of FISH Open Hand Palm Up to Tammy (reproduced here for comparison).

**Figure 6.19: Jane just said “FISH! Open Hand Palm Up”**

Lynn responds by raising her open hands to the sides of her face then dropping them down in front of her (Fig. 6.31). As Lynn raises her hands, Mary proffers her last guess “A hot dog!” and by the time Lynn’s Open Hands Palm Up are dropped, Lynn has processed Mary’s guess which prompts her to point to Mary signaling she was right (not pictured).
As we can see, Mary couples her guess “A hot dog!” with a repetition of the gestured form she produced silently in between utterances which I glossed SEE? (Fig. 6.30). The form conveys a different meaning here; it is now stripped of the iconic and indexical elements that were foregrounded in the first instance, serving now as a trace of a prior utterance. Essentially, Mary utters her guess verbally but marks the transfer of the guess, its interpersonal meaning, gesturally and at the same time recycles the manual forms from the immediately previous sequence. In this example, where it is clear to whom Mary should be directing her guesses, the interactive gesture first functioned as a marker of uncertainty about the guess then became a schematized trace of that utterance as the turn unfolded.

To summarize, I demonstrated how the Open Hand Palm Up form is used to seek help and to present information. Participants orient themselves toward each other’s utterances in part by using the Open Hand Palm Up form. I analyze stance taking as a joint activity (cf. Du Bois, 2007) that emerges across utterances and even across distinct speech events. These data show that stance taking, including the positioning and alignment of interlocutors’ bodies and articulators of the body, is also a physical act (cf. Goodwin, 2007; Kockelman 2005). By pinpointing this particular manual form as a site where other semiotic fields (torso orientation, eye gaze, and facial expressions to name a few) are simultaneously active, I have shown that
these forms function much like discourse marker signposts, cueing the other participants that an act of evaluation is occurring.

I take this argument further in the next section where I consider the Open Hand Palm Up when it is flipped. The flipping movement marks a shift in interactive meaning from the delivery/citing/seeking functions I highlight in the previous exchange to an evaluation of talk in making the gesture a strong candidate for marking stance.

6.3.3 Open Hand Palm Up as corporal discourse marker

While transcribing the data from the deaf group, I came across a significant number of the Open Hand Palm Up and Gun Handshape Palm Up gestures that resembled the same interactive gesture I just examined in the previous section. In many cases, participants flipped a gun handshape to a supinated position (Gun Handshape Palm Up) in slots where an Open Hand Palm Up could have also been used. To investigate these forms further, I returned to both sets of data, transcribed every instance of an Open Hand Palm Up and Gun Handshape Palm Up and then examined how interlocutors used them as a part of a broader interaction unit.

I quickly discovered in the ASL data three things. First, these forms were ubiquitous. The physical articulation was influenced by the position of the signers’ arms (e.g., if the signer were resting her elbow on the table, the Open Hand Palm Up could look more like an open hand with its palm facing the signer) but their discursive functions remained consistently oriented to marking connection to prior and upcoming talk, evaluating utterances, and signaling connection with interlocutors. Second, these forms were produced very quickly, in some cases, I completely overlooked them until I slowed down the film’s frame rate. Third, the forms always co-
expressed with other semiotic *signs*. When manual co-expression occurred (meaning a signer signed with one hand while producing the gesture with the other) the signer’s passive hand would typically hold the Open Hand Palm Up or Gun Handshape Palm Up while the active hand signed content. We see an example of that here (Fig. 6.32 A-C), where Todd constructs a dialogue he had with a friend who asked why he ate his food so fast. Here, he replies, “Open Hand Palm Up FEEL HUNGRY Open Hand Palm Up”; “*I was hungry!*”.

![Image A](image1)

A.

![Image B](image2)

B.
Todd looks to his left to begin a surrogate blend (A.) and signs with his right hand “FEEL HUNGRY Open Hand Palm Up” while his left hand holds an Open Hand Palm Up throughout the entire utterance. The buoyed left hand resembles Enfield’s (2009) symmetry-dominance constructions which he defines as gesture phrases where one of the hands of the first gesture is held in place while the second gesture performs some act on or in relation to it (typically when modeling something). In this example, Todd’s Open Hand Palm Up with his co-occurring facial expression serves as an evaluation of the talk he presents (both to the imagined interlocutor and the real one sitting in front of him). What is interesting in this example is how Todd bridges between the surrogate blend and the actual exchange with John by producing the same Open Hand Palm Up in two different discursive environments: first, as part of the embedded dialogue he creates and then when he returns eye contact with his interlocutor, presenting the narrative to John for evaluation. In other words, while he simulates an interaction he had with another person in a different space and time (marked with his head shifted to the left), he marks his constructed discourse with the Open Hand Palm Up. Then, when he shifts from the simulated conversation to the conversation with his physically present interlocutor, he extends that evaluative marker (once embedded in a constructed dialogue) to serve a different pragmatic purpose.

Some might view these forms as nothing more than fillers—gestural equivalents of the “ums” and “uhs” that incessantly punctuate spoken discourse. There are certainly moments in both data sets where these forms act as fillers. Schiffrin (1987) notes a similar function of the
discourse marker *well*, but interprets it as providing the speaker time to plan a turn. Streeck (2002), too, discusses how the English word *like* has multiple variants, functions, and meanings that make the word “particularly suitable as a ‘filler.’” But Streeck continues the filler function also serves as “a device used when the speaker is hesitating in committing to a continuation of the talk” (585) which closely aligns with the way this gesture is used.

Here (Fig. 6.33), Mary uses the Open Hand Palm Up flip while stating “Well, we can’t ‘cause…” Mary evaluatively marks her utterance verbally using *well* and gesturally with the flip.

![Figure 6.33: Mary uses Open Hands Palm Up when answering her own question](image)

When Sara says “It was really only like one full glass for each of us” she co-expresses an Open Hand Palm Up flip with both hands (Fig. 6.34 A&B) starting on “really only like” and return to neutral position on “one full”.

![Figure 6.34 A: “It was really only like B: one full glass for each of us”](image)
Then she produces the same form again when she says “There’s only like four glasses in a bottle” opening and then closing on “only like four glass–” (Fig. 6.35 A&B).

Figure 6.35 A: “There’s         B:     only like four glasses in a bottle”

The gesture here serves three functions: it presents the proposition to Sara’s co-participants, it also hedges her propositions which are equally hedged in her speech (“It was really only like” and “There’s only like”) and it marks (through its repetition) a connection between the two utterances.

The Open Hand Palm Up flip can also be used as a coda to a story. Tori has just finished giving a lengthy explanation about how she broke her toenail and it never fully healed. Mary and Lynn start to shift focus back to the game and Sara quips “It’ll only take three more years [to heal].” After a brief pause, where it is clear the others (Mary and Lynn) have transitioned back to the game (Fig. 6.36), Tori shrugs slightly, tilts her head to her left, and flips both Open Hand Palm Up forms in space. After the gesture is fully articulated, Tori returns her hands to prone position (ending the articulation of the gesture) and verbally utters “So” demarcating the end of her story.
Tori uses the Open Hand Palm Up flip as a coda to her story, which is also achieved through the verbal expression “So.” Kärkkäinen (2006) notes the prevalence of epistemic stance markers in codas of stories. This example is simply a gestural instantiation of that sort of stance marking. What is equally compelling about Tori’s gesture is that the Open Hand Palm Up flip emerges and disappears well before she articulates “So”. I point this out because it is frequently the case in my data that this particular gesture emerges during utterances where some shift in the discourse occurs (such as when well or so might be used) but it is not always the case that it co-occurs with these verbal discourse markers. In other words, when a speaker utters a statement with well, the Open Hand Palm Up flip might emerge before or after the word well is uttered but not often with it.

This lends further weight to my claim that the gestured form has meaning on its own; interactants produce it as they might produce a word. This also impacts the way analysts view the form (and its associated function) in ASL. Glossing conventions that ascribe this gesture the gloss WELL constrain it to a limited set of semantic associations. If we associate this gesture
with the English *well* then we approach the data with a top-down assumption of meaning that is inconsistent with how it emerges in discourse (i.e., not co-expressed with that word).

In the next section, I examine the Open Hand Palm Up flip as it emerges in an extended stretch of talk between three interlocutors in the deaf group. I demonstrate how the current speaker, Jane, uses Open Hands Palm Up and Gun Handshapes Palm Up as she constructs her discourse in response to two interlocutors: John (who is receiving the narrative anew) and Todd (who already knows it). Jane uses these gestures to hold her claim to the floor, parse the discourse into relatable chunks, and present information to her interlocutors. They also display the speaker evaluating her talk and calling her addressee to evaluate it as well.

6.3.4 Discourse analysis of Open Hand Palm Up in sign discourse

The group has not yet started to play the game but they have settled in to the game playing space. Tammy is reading the instructions and tries to get John’s attention to ask if he would read them to the group. John, though, is engaged in a conversation with Jane who is explaining that her family has had a lot of house guests in the past few months. Todd watches Jane explain this to John and interjects new information at the end which triggers Jane to produce an Open Hand Palm Up that is both a citing and delivery gesture (in relation to two interlocutors with different information states).

<table>
<thead>
<tr>
<th>Houseguest discussion, Deaf group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Jane</strong></td>
</tr>
<tr>
<td>Handwave [#ALL?] #UN-EXPECT</td>
</tr>
<tr>
<td>Open Hand Palm Up</td>
</tr>
<tr>
<td>[lh Open Hand Palm Up]</td>
</tr>
<tr>
<td>1 Jane</td>
</tr>
<tr>
<td>(leans torso left) EXCEPT [T-NAME]</td>
</tr>
<tr>
<td>John</td>
</tr>
<tr>
<td>Raises head</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>---</td>
</tr>
</tbody>
</table>
| 3 Jane | [KNOW #BUT point-to-lh] | John | Lowers head, brows neutral  
[lh ONE] |
| 4 Jane | [T?] OHPD wg fingers | John | Mirrors Jane’s NMS, head shake, raises brows  
[lh ONE] |
| 5 Jane | FINE SURE= | John | Tilts head back, brows still raised  
=lh COME-OVER |
| 6 Jane | NEXT, NEXT (head shakes & nods to show incremental) NAME-PERSON | John | Lowers head, brows neutral, opens MO slightly |
| 7 Jane | wg Open Hand Palm Up SURE COME-OVER | John | Short nods |
| 8 Jane | Gun Handshape Palm Up, held in space, leans back in chair | John | Short nods smiling |
| 9 Jane | Looks in own sign space, brows raised, frown face with Open Hands Palm Up flip | John | Short nods smiling |
| 10 Jane | THINK NOW-ON NOTHING | John | Short nods, laughs slightly |
| 11 Jane | Pulls hair from neck, starts to mouth “OO” briefly looks at Todd then back to John | Todd | Waves at Jane. T-Waves again (John looks at Todd then to Jane) |
| 12 Jane | I #DID TELL-HER (Tammy) FEEL OUT? NICE FOR CHANGE (last three signs shifts EC >Todd) | Todd | Taps Jane’s elbow, raises hand to start sign, then taps elbow again NO++ (John EC>Todd) |
| 13 Jane | EC >Todd | Todd | T-NAME SEE-SEE COME T-NAME HOME Open Hand Palm Up. |
| 14 → Jane | Turns to John RIGHT Open Hands Palm Up NEXT THAT Gun Handshape Palm Up | John | looks back at Jane, raises head and brows then lowers head on Gun Handshape Palm Up and looks at To then back to Jane who keeps talking |

This example begins with Jane qualifying that all her house guests during the summer were unexpected: “#ALL#UN-EXPECT Open Hand Palm Up”. Jane ends her utterance with the
Open Hand Palm Up form and holds her hands in place while extending eye contact with John (Fig. 6.37). The result is both delivery of new information to John but also a call for him to evaluate the utterance she just relayed--John smiles in response. Notice, Jane’s facial expression (lowered brows and stretched lips) contribute the semiotic information that conveys her evaluation of the talk (namely, that the unexpectedness of the visits was noteworthy).

Figure 6.37: Jane flips Open Hands Palm Up while John and Todd watch her

My conclusion about the function of this form is informed in part by the response seen in Jane’s interlocutors (since as analysts we cannot know all of the information that is shared between participants). Had John, in response to Jane’s “#ALL #UN-EXPECTED Open Hand Palm Up” agreed with her or shook his head “no”, we would not conclude that the delivery gesture marked new information. Or better stated, we would conclude that Jane presented the information as if she thought the information was new and then learned that it was in fact shared. The marker’s meaning, then, is contingent on its situated instantiation based on a previous mention and on the knowledge shared between interlocutors. It both indexically ties to and symbolically evaluates prior talk through the co-occurring nonmanual markers.

Jane’s utterance gets no response from John though and she moves to elaborate further upon what “#UN-EXPECTED” means (Lines 5-7). First, she explains that they received
requests for visits incrementally over time. At the end of this phrase, she shifts slightly to her left and constructs a dialogue with this series of friends saying, “Open Hand Palm Up SURE COME-OVER Gun Handshape Palm Up” “*Well, sure, come on over!*” (Fig. 6.38). Jane begins the constructed dialogue with an Open Hand Palm Up and ends it with a Gun Handshape Palm Up. This pattern emerges again later in this conversation which I examine in more detail next. Essentially, when used in this way these gestures form a sort of visual bracket around the utterance that the speaker is evaluating and/or calling her addressee to evaluate.

**Figure 6.38: Jane holds Gun Handshape Palm Up in space while planning next turn**

Jane is holding her turn here because her face remains active, she has a slight frown, her brows are raised, and her arms are out of rest position (Fig. 6.39). John reinforces her speaker status by nodding slightly, maintaining eye contact, and not signing, all classic “continuation” signals in ASL of an addressee to a speaker (Baker, 1977). Jane’s Gun Handshape Palm Up transitions into an Open Hand Palm Up flip as she produces her next utterance “Open Hand Palm Up-flip THINK NOW-ON NOTHING” where she concludes her turn (Fig. 6.39).
Unlike the first time Jane flips the Open Hand Palm Up (in Figure 6.37), here, her eye gaze is directed in her own signing space. She is also shrugging slightly, her brows are raised and her mouth is slightly frowning. While Jane knows that she has addressees (she is communicating this information to them), this assembly of semiotic *signs* also displays Jane’s evaluation of her own talk, marked thus by eye gaze in her own space.

Todd finally gains Jane’s attention (after waving at her and then tapping her while Jane wrapped up her turn) and informs her that they may in fact have another guest if one particular friend decides to come to town. In response, Jane turns back to John and says “RIGHT Open Hand Palm Up. NEXT THAT Gun Handshape Palm Up” (Figs. 6.40 & 6.41).
Figure 6.41: Jane just uttered “NEXT THAT” then gestures Gun Handshape Palm Up with her right hand

Notice here the transformation the Open Hand Palm Up form has taken again while bracketing the utterance “NEXT THAT”: the Open Hand Palm Up gesture is held in position with extended eye contact then is followed by a Gun Handshape Palm Up. While Jane returns her gaze to John (her original interlocutor) Jane’s brows are in neutral position and her lips are pressed together. Taken together, the manual forms with the co-occurring facial expressions and placement in the unfolding sequence of talk serve as a classic delivery gesture that signals new information (to John), and marks shared information (with Todd), and evaluates the talk as noteworthy. In other words, the form marks a shift in information state (for John) but it also reifies the mutual awareness (shared with Todd) that she and Todd might in fact have another houseguest and evaluates that impending visit as notable.

The trajectory of the conversation can be schematized as follows where the arrows represent shifts away from, back to, or continuing on the expected trajectory of Jane’s discourse:

Jane: House guests were all unexpected (Open Hand Palm Up)

Jane: Except for one

Jane: Elaborates how the situation came to pass
When viewed in this way, an interesting pattern emerges where topics containing new information is introduced are marked with an Open Hand Palm Up while Gun Handshapes Palm Up mark information that is already salient to the discourse. The pattern is consistent with the semiotic progression of signs: the form of the hands shift in accordance with the dynamic shift in saliency of the information. When a topic or piece of information is new, the hands are open fully (or almost fully) as if relaying the semantic weight of the new contribution. Once the information is presented to the discourse, three of the fingers contract and the hand presents only the thumb and index which is enough to refer back to the previously mentioned information. This symbolism also closely aligns with Kendon’s interpretation of the form as presenting the giving or receiving of information: the newest information is represented with a completely open hand while the given information is represented with a partially open one.

We have seen in these data, that the form can change as a discourse unfolds, as Jane uses it to present her discourse to her interlocutors and to herself in diverse ways that extend beyond
the semantic association with *well*. The form acts as a delivery gesture, to be sure, but it also functions to cite prior talk (referring to information that has already been presented in the discourse) and to evaluate as a discourse marker whose textual coordinate is oriented toward the speaker and toward upcoming talk (Schiffrin 1987). The banality of the form (in terms of its physical composition) seems to make it extremely flexible and fluid in the positions it can take in talk. Universally, the Open Hand Palm Up orients to talk in interaction. The act of evaluating, positioning and thus aligning with others is a product of interaction (not an isolated, internal event). This gesture, that acts like a word, semiotically foregrounds the interaction and, most importantly, the current speaker’s place within that interaction.

6.4 Conclusion

In this chapter, I pinpoint two features of embodied discourse that situated the participants in relation to each other and in relation to the broader speech event. I first presented gestural mimicry and mirroring as embodied instances of repetition, a feature that is typically analyzed in verbal utterances. Du Bois (2007) proposes using a diagraph to demonstrate the alignment that occurs across speakers when stance acts are taken. I discussed how the diagraph, while useful, could be amended to incorporate the co-occurring embodied forms that emerge when speakers create stance utterances. Du Bois admits to the limitation of his tool, that to show how alignment is achieved we also need to show the "resonance generated through the act of reproducing words and structures of the prior speaker" (166, Emphasis added). Though I do not offer an enticing alternative, listing co-occurring semiotic phenomena with lines to mark their duration is a triage attempt at demonstrating how these utterances are multi-layered with
meaning from other semiotic fields. Goodwin and Enfield both call for a multidimensional analysis of utterances as composed of conglomerations of articulators but capturing these units in an analysis continues to be a challenge.

Though I have not listed all of the mirroring behaviors that occur during signed discourse, one of the most prevalent I have seen is a mirrored head-shake or nod during complex sentence structures (e.g., rhetorical questions, topicalized phrases, or conditional clauses). An addressee who is fully attending and signaling comprehension of the signer’s utterances, for example, will mirror the movement of the signer’s head as it moves. It is a sort of backchannel cue that signals connection with the speaker through corporal synchrony; they are so closely attuned as to be physically connected by the utterances. I suspect one of the reasons we do not see this phenomenon as frequently in the spoken group is due to the fact that an addressee in sign discourse maintains eye gaze with her speaker for longer periods of time than in spoken discourse, thus allowing for more moments of the “constant monitoring” Kimbara (2006) describes.

I transitioned to an analysis of two manual forms I call the Open Hand Palm Up and the Gun Handshape Palm Up. I argued for an interpretation of these forms as manual discourse markers. Because these interactive gestures emerge in similar ways independent of modality, and because these forms function as discourse markers in ASL, I also proposed that we broaden our conceptualization of discourse (but more controversially, language) to include all symbolic behaviors of the body. While many sociolinguists acknowledge that gesture plays a part in discourse, these data hopefully show that gesture’s role is not ancillary to interaction but is as central a mechanism behind it as speech. Likewise, by seeing these forms in spoken interaction
and applying interactive gesture typologies (Bavelas, 1994) and a semiotic analysis of their functions in sign discourse, I hope to have furthered my claim that gesture in sign is not limited only to depicting constructions and deixis.

I would like to return to an issue I raised at the beginning of the chapter concerning the gloss WELL. In ASL, some have argued (cf., Roush, 2007; Hoza 2011) that the Open Hand Palm Up can be interpreted to function like the discourse marker well. How does glossing the form WELL constrain our understanding of its function? How does the gloss augment our understanding? There are slots wherein the form could be translated as the English well (for example, when Jane reconstructs dialogue with one of her house guests “Open Hand Palm Up SURE COME-OVER”, “Well, sure! Come on over!” But there are other slots where it functions like the English so, such as when she flips the Open Hands Palm Up before saying “THINK NOW-ON NOTHING”, “So, I think from here on out we won’t have any more visitors”.

Glossing the form WELL also precludes us from seeing the correlation between the Open Hand Palm Up and the Gun Handshape Palm Up, a variant that appears to emerge at distinct moments in the trajectory of a discourse. Both forms present an utterance to the interlocutor but one (Open Hand Palm Up) appears to mark new information and the other (Gun Handshape Palm Up) information that was already given.

Although I am critical of glossing the Open Hand Palm Up form using the English WELL, there is a benefit to glossing the form. At least symbolically, glossing gestures ascribes status to a unit of meaning as part of a linguistic code. I think one of the ways sign language linguists have bypassed discussions of gesture/sign distinctions like the ones I take on in this study is that they characterize a particular form as inherited from “naturally occurring” gesture
(cf. Hoza, 2011) and then wipe their hands of the gesture problem. This ultimately perpetuates a misconception that these forms once belonged to hearing people but after crossing the boundary to sign language, their constitution somehow changed from a non-linguistic form to a linguistic one. I, too, have argued this point in documenting ASL’s historical link to LSF (e.g., Shaw & Delaporte 2010) but have since shifted my understanding, particularly when we consider a Peircean analysis of how humans create, manipulate, and reinvent signs.

Interactive gestures like the ones here occupy slots where the gesturers express their stances. Interactants do not need to verbally announce, for example, when it is someone else’s turn nor do they need to say “I see that you understood me”. We are able to signal these things through our bodies which is meaningful and doubly efficient, saving us time by allowing us to minimize the amount of words we need to say. But it also allows us to signal relationships with interlocutors and with prior talk that is “off record” (i.e., not spoken). Iwasaki (2011) also found that people use embodied moves, including manual gesture, to signal off record stance claims (114-115). Likewise, Enfield (2009) notes the power of gesture as a “less obtrusive” means of projecting stance (108). This is not to say that interactants never use speech to convey these things. However, by parsing out the variety of interactive moves people make and examining how their bodies signal these moves, we expand our understanding of discourse and how it is constructed.
CHAPTER SEVEN

CONCLUSION

7.1 Introduction

I introduced this study by positing that a connection between spoken and sign languages can only be uncovered in the body through gesture. The behaviors of the body I focus on here, shift along a continuum of forms with great fluidity. Armstrong & Wilcox (2007) argue that human language “is now predominantly spoken” (38) but I have questioned throughout this study if we can conclude that with absolute certainty. It is certainly the case that hearing people (generally) prefer spoken utterances to communicate with each other. However, it is also the case that gesture plays a central role in spoken language. We have just begun to document and analyze spoken interaction with its co-occurring gestural components; we do not yet know how proliferate or systematic gesture is.

I opened this dissertation discussing the classification of gestures as one particular challenge researchers face. The term gesture encompasses a wide range of forms and accordingly scholars have focused analytic lenses on different behaviors of the body per distinct research interests. Several interpretations of the gesture-language interface have been presented. McNeill (1992, 2005) highlights the connection as evidence of a cognitive process unique to spoken language where static and dynamic aspects of ideas merge. Kendon (2004, 2008) presents the relationship as rooted in cultural contexts where gesture is part of the linguistic makeup of both spoken and sign languages. Bavelas (1994) and Kimbara (2006) see gesture for its contribution to discourse-level phenomena.
Scholars continue to disagree about what gesture constitutes in sign language. Emmorey (1999 and more recently Emmorey, et al 2007) upholds that there is a distinction between gesture in spoken and sign languages while Liddell (2003) and Cormier et al (2012), for instance, allow for some similarities between the two. There is no denying that gesture is related to language in some way but accounting for that interface while incorporating both sign and spoken languages has been fraught with challenges.

This study represents a first step in approaching spoken and sign discourses from an interactional sociolinguistic perspective that incorporates works on semiotics, multimodal interaction, and linguistic analyses of sign language. I began with the premise that sign language is a clear illustration of embodied discourse, where different articulators (like the hands, torso, head, eye brows, and mouth) contribute to utterance construction in systematic ways, and extended that viewpoint to analyze a spoken interaction. I have argued throughout this study that segmenting gesture from language ultimately limits our ability to account for the sorts of constructions both hearing and deaf people ordinarily produce in discourse--constructions that in fact incorporate a range of conventionalized and non-conventionalized elements. I concluded that we are better served in explaining the relationship if we reframe our view of both gesture and language and begin with the premise that all languages are fundamentally embodied.

I formulated my argument based on data gathered from two game nights between four friends: one group was hearing and one group was deaf. I asked both participant groups to gather as part of a social event to play the Charades-like game Guesstures. The game organically primed the participants to produce a range of gestural forms from the highly iconic and pantomimic to the highly abstract and interactive (see Chapter 3 for more detail). The game
also served as a control allowing me to scrutinize side-by-side how the hearing and deaf participants communicated when asked *not* to use their linguistic code.

In the past, English and ASL have been compared to illuminate differences between the modalities (e.g. Goldin-Meadow, et al 1996; Emmorey 1999). I elected to compare English and ASL discourses specifically to see how interactive pressures influenced gesture. Rather than extract signs, words, gestures, or phrases from the context, I purposefully analyzed them as components of situated speech events looking at local contingencies (prior turns) and global constraints (broader contexts).

I applied an assembly of theories in my analysis of these data. Schiffrin’s (1987) model of discourse coherence provided a structure to account for the interactive work my participants conducted. By elucidating the different discourse planes (the exchange, action, ideational, information, and participation planes), I identified where embodied moves contributed information beyond conveying propositional content. Works on sign languages, especially those that apply cognitive linguistics (e.g., Liddell (2003) and Dudis (2004)), provided a foundation for examining the contribution of those less conventionalized, corporal moves (e.g., depicting constructions, buoys, and eye brow raises) to discourse coherence. Peirce’s (1955) theory of semiotics provided a framework for explicating how meaning is progressively generated through all sorts of *signs*. Peirce’s interpretation of *signs*--in contrast to Saussure’s--implicates language users (interpreters) whose *interpretants* (reactions to or interpretations of *signs*) are central to the generation of meaning; the act of interpreting a *sign* must occur in order for the *sign* to exist at all. From works on multimodal interaction, I gleaned useful heuristics (most notably, Enfield’s *composite utterance*) to document and analyze the constructions my
participants produced through speech or sign and corporal gesture. These works served as the foundation for accounting for the gesture-language relationship in a systematic way.

Traditional conceptualizations of gesture as a continuum of forms give the impression that forms evolve from one end of a spectrum to another. While appealing schematically, the underlying implication is that sign language somehow becomes devoid of the functions accomplished by gesticulation once it becomes codified. Both Kendon (2008) and McNeill (2005) have pointed out the limitations of the continuum as not fully capturing what gesture is and does in spoken language. The continuum has also presented a sort of theoretical impasse over which sign language scholars have had difficulty crossing (since sign language is presented in opposition to gesticulation). I proposed an alternate interpretation of the range of forms exhibited in interaction as evidence that language users are capable of moving (and, crucially, inclined to move) their utterances in both directions—both toward iconicity and away from it based on situational constraints (see also Cormier, et al (2012)). I made this claim by analyzing the gestures of the body as parts of larger composite utterances (Enfield 2009) and then analyzing the composite utterances as operating on different planes of discourse (Schiffrin 1987). This required me to consider the meaningful contribution of eye gaze to spoken utterances that co-occur with manual forms. Each articulator, then, contributed to utterance creation and discourse coherence.

Following the tradition of interactional sociolinguistics (e.g., Goffman (1981), Gumperz (1992), Hymes (1964), Schiffrin (1987)) I examined speech events—starting with game play, then focusing on task-based exchanges, and finally discussing two specific behaviors (gestural mirroring and the Open Hand Palm Up) in each interaction. What I did not anticipate was the
degree to which the basic pattern of communication (i.e., the give and take required to reach mutual understanding) would permeate the turns-at-play. Much as interlocutors do in regular conversation (Goffman 1981, Schiffrin 1987), gesturers utilized highly iconic gestures in congress with more abstract, interactive ones in response to their teammates’ uptake of gestured clues. This discovery guided my analysis of the gestures used during the games, as well as throughout the rest of the interactions. Instead of assessing gestures for their respective degrees of gradience (or where they might land on the continuum), I focused on the speaker-hearer relationship as the driving force behind the choices participants made in crafting gestural utterances. Both hearing and deaf interactants employed the body’s articulators in dynamic ways that showed strategic use of iconicity and the juggling of multiple interactive demands. The intermingling of the range of gestural forms, I claimed, reinforced that spoken language is embodied and showed that deaf people also incorporate a range of behaviors akin to gesticulation in Kendon’s Continuum.

In sum, instead of extricating sign language from the gesture-language interface, we can view it in terms of a gesture-language interface and from this vantage point, integrate what we have learned from analyses of sign language into the spoken language fray. The attention, then, must shift from uncovering gesture cognates in speech and sign to reaching a better understanding of how human beings conceive of and convey ideas in face-to-face interaction. Taken together, the theoretical works as I have applied them to these data, point toward a new way of seeing gesture—one that moves away from the entrenched dichotomy between gesture and language to an integration of gesture as language. I turn now to a more detailed overview of my findings.
7.2 Overview of findings

In Chapter 4, I presented performance gestures from both groups when they played the game Guesstures. Participants marked orientation to multiple interactive priorities through different articulators as the turns-at-play unfolded. While a gesturer performed a clue using highly iconic gestures, for example, he/she used eye gaze to deictically highlight for his/her teammate which element of the gestured form should be focused on. I emphasized the juxtaposition of interactive gestures and performance gestures to highlight the fact that even when gesture took on full burden of communication, interlocutors were able to communicate in ways that resembled ordinary discourse. They still signaled orientation to the game play “conversation” by manipulating their gestured utterances to suit their addressees and by encouraging their teammate to keep guessing: two tasks that prompted the use of more abstract forms.

These data showed what Parmentier (1987) calls “the possibility for creativity built into semiotic processes” (29) where the relation between the performance gestures and their objects (the written clues in this case) was mediated through the interpretants of the guessers. We saw online how the gesturers changed their performance gestures as they honed in on their teammates’ interpretants; I talked about this as the process of reaching “common ground” (cf. Gerwing & Bavelas 2004). By shifting focus away from proving the linguistic potential of gestures in isolation (i.e., in one form or by one speaker), I showed that the pressure to connect, to reach mutual understanding, triggered interlocutors to shift the quality of the gestural forms along the theoretical continuum ad hoc.

In Chapter 5, I focused on gestures that emerged during situated activities where interactants engaged to accomplish some shared task (e.g., collecting pseudonyms and reading...
The constant flux of conversations in these speech events resembled the distilled instantiations of exchanges during game play. I framed the discussion in this chapter as an examination of the exchange plane (where turns are managed), the action structure (where speech acts are conveyed), and the participation framework (where stances are marked) to shed light on where the embodied moves contributed to these aspects of discourse coherence. I first analyzed the use of turn management strategies where interactants employed composite utterances to allocate speakership rights. These moves included verbal/signed utterances co-expressed with deictic markers, eye gaze and torso shifts to select addressees. The composite utterances transferred turns but also contributed to the construction of a single participant’s stance as turn regulator (“in charge”) of that portion of the exchange.

I then discussed the composite utterances in two slices of discourse where participants both demonstrated and described (borrowing from Clark & Gerrig 1990) how to execute a turn-at-play by co-articulating meaningful content through the speech/sign stream, physical gestures, and items in the surround. With the introduction of a shared practical task, the goal of communication shifted in perceptible ways. For instance, one of the hearing players (Lynn) composed a verbal utterance “I see my word Earmuffs” while using a card and the game box to produce the composite form: “I” PICK-UP THE CARD “see my word Earmuffs” and HIDE THE CARD FROM VIEW.” 37 From the sign discourse, I analyzed an utterance produced by John where he mouthed “if” while signing and leaning toward the game box in the middle of the table: “‘If’ you GESTURE FOR A WHILE this the card that is in this slot? ‘will’ DROP DOWN

37 Gestured glosses are capitalized, inferred meaning is in italics, verbally uttered phrases in quotes.
INTO THE BOX.” In these examples, I argued that interlocutors are inclined to quickly make themselves understood and naturally switched between or simultaneously employed different articulators to convey intent. These data showed the communicative potential of semiotic signs and the capacity of interactants to exploit any number of resources to reach common ground.

In this chapter, I also introduced the notion that stance acts are inherently composite and, while they have long been considered embodied (Bateson 1972, Goffman 1979, Gumperz 1992, Goodwin 2007), they are typically analyzed as primarily verbal (Du Bois 2007; Kärkkäinen 2006). Researchers on multimodal interaction such as Enfield (2009) and Iwasaki (2011) have proposed that gesture is an effective way to conduct “off record” evaluations during interaction. In one example from the spoken discourse, Mary signaled an unwavering orientation to reading the rules. This stance was not communicated through the speech stream and had to be analyzed as a constellation of moves that included deictic points, eye gaze, and also holding the instructions made throughout the interaction. People are able to (and frequently do) convey ideas through gesture, however they also organize face-to-face interactions through their bodies. This point is important to the study of spoken discourse since so much content is communicated through the speech stream. The body is freed to convey information beyond the ideational plane including “off record” evaluations (cf., Iwasaki 2011; Enfield 2009). For sign discourse, identifying interactive components enables us to see the amount of work conducted through embodied signals that are not typically considered “sign”.

In Chapter 6, I explored this aspect of interaction further in gestural mimicry (Kimbara 2006) and mirroring, and the manual Open Hand Palm Up. I drew from Bavelas’ (1994)

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38 Single quotes denote words that were *mouthed* but not signed, underlined text describe meaning derived from the signer’s eye gaze, italicized words represent deictic points, and capitalized words are glosses for manually produced signs.
typology of interactive gestures and incorporated Schiffrin’s (1987) analysis of discourse markers to parse the less iconic, gestural moves and analyze them for their contributions to discourse-level phenomena. I defined gestural mirroring as a subset of gestural mimicry (and also verbal repetition) where addressees simultaneously mirror elements of the speaker’s gestural moves. For example, participants in both data sets mirrored torso moves, head nods, and manual forms performed by teammates as they processed guesses during game play. During conversation, when addressees signaled alignment with speakers, mirroring became a physical marker of evaluation. Mirroring, then, was an addressee-initiated component of a stance act (Du Bois 2007).

Stances (more specifically, evaluations) were also marked by the Open Hand Palm Up gesture and its related variant the Gun Handshape Palm Up gesture, both of which were used by speakers when signaling orientation to their addressee’s talk (e.g., to mark delivery of information or cite a previous turn). I detailed instances where the forms were used as classic interactive gestures (Bavelas 1994) that metaphorically conveyed the giving or receiving of information to the addressee (Kendon 2004). I then discussed their use as evaluative markers, especially when accompanied by a wrist flip and co-occurring facial expressions (like an open mouth or head tilt). The gesture is sometimes glossed WELL in ASL (e.g., Hoza 2011) but by shifting to a physical description of the form, I was able to demonstrate how the Open Hand Palm Up was used in complementary position to the Gun Handshape Palm Up (where the Open Hand Palm Up marked new information and the Gun Handshape Palm Up marked information already given).
Both hearing and deaf participants in my study constructed gestural forms (ranging from gradient to static) by employing constellations of articulators. By examining these gestures as rooted in contexts, I was able to demonstrate that participants craft gesture just as they craft verbal/signed utterances. These verbal and nonverbal behaviors typically happen in tandem, as has been thoroughly documented in prior work (see McNeill 1992); but by incorporating multiple articulators into the analysis of spoken discourse, I push further the claim that spoken and sign languages are less distinct than we think. Manual gestures are an important part of both spoken and sign languages, however, the eyes, eye brows, torso, head, mouth, and vocal cords are equally active in utterance creation yet frequently disregarded in linguistic analyses. I turn next to discuss some of the recurrent themes that I addressed throughout this study before discussing unresolved issues and next steps.

7.3 Recurrent themes

To identify how gesture patterns in situ, not just symbolically but interpersonally, we must examine it as we do spoken discourse. I expand on themes related to this proposition, focusing specifically on typology, methodological implications for spoken and sign languages, and finally, how we might reframe our view of language and gesture to achieve a unified framework.

7.3.1 Gesture typologies

Typologies of gesture have provided useful insight into the range of forms that gesture can exhibit--from the highly schematic to the highly concrete. My analysis of gesture in interaction attempts to advance arguments that gesture is modality-neutral (e.g., Kendon 2008; Okrent
2004; Cormier, et al 2012). If we are going to establish a theoretical framework that includes sign languages, a contextualized account of how gesture patterns as an integrated part of different discourses is essential.

The desire (not to mention the methodological need) to categorize forms has influenced the conceptualization of “gesture” as primarily manual. Parsing gestural forms from linguistic ones may be useful as a theoretical exercise when classifying a lexicon, for example, but it does not help us understand the meaning behind constructions that consist of simultaneously produced gestures of different articulators that exhibit a range of systematicity. When analyzed as part of a discourse unit, each individual gestured form (be it a move of the hand, arm, torso, head, or vocal cord) can be considered one particle in a complex matrix of forms.

I propose that we focus some attention on redefining the articulators we consider capable of conveying linguistic content in spoken language (and not simply emblematic gestures). This requires us to also expand our regular treatment of gesture to include not just manual gestures but those of the eyes, eyebrows, torso, arms, and also vocal cords. Participants in my study (as has been shown elsewhere (e.g., Goodwin 2007)), shift their gesturing articulators based on situational demands. When manually gestured content became the focus during game play, gesturers situated their hands where they could be seen and gazed at the gestured constructions to highlight important conceptual elements. When a physical object like the game box became the subject of attention, participants oriented their torso, hands, and eye gaze toward that object. The complex fabric of these exchanges is missed when we only consider the behavior of the hands and arms as potentially meaningful. Before we can uncover the degree to which hearing people rely on multimodal resources to construct their utterances, we must begin to view the
componentiality of utterances as embodied and become more systematic in our documentation and analysis of the body in spoken discourse.

My analysis of gesture in interaction is influenced by my view that sign language contains so-called static forms that are, in fact, mutable. Discourse in face-to-face interaction is unpredictable and messy but the meaningful use of the body (cf. Yerian’s (2000) discursive body and Kendon’s (2004) visible acts as utterance) is pervasively systematic. At some point, we have to get beyond treating the same gestured expression as linguistic (or not) simply based on the language in which it emerges. Raised eyebrows, for instance, tend to accompany the articulation of Yes/No questions; in ASL, they are treated as part of the grammatical structure of the language (Baker-Shenk, 1985) but in English, they are treated as gesture (and thus, not part of the linguistic code). Gesture, in this case, is “too coarse” a term (Enfield 2009) for the type of analysis these moves require.

Peircean semiotics provides an account for the flexibility and mutability of gesture (and language) while also accounting for how gesture (and language) can become conventional. Human beings are endlessly creative in the ways they can and do express themselves; the creativity is possible because of how we interpret and construct semiotic signs to convey ideas but also signal social relationships and pragmatic meaning. Taken with what we know about interactive patterns, this reframed view of gesture allowed me to account for the ways in which iconicity remains a powerful resource in sign language and at the same time explain how hearing people can manipulate articulators in semiotically complex ways even without speech (i.e., during game play).
7.3.2 Implications for the study of spoken language

Like the subtle cues in intonation that signal shifts in a speaker’s evaluation of a certain subject matter, our bodies, too, subtly shift moment by moment and unless these moves are captured in a transcript, these “elegant ephemera” (Bavelas 1994) are escaping our notice as much as they are escaping the subjects we study. Capturing these ephemera is challenging. The moment analysts try to put down on paper what we see, we are faced with an overwhelming urge to put down nothing at all. We are forced to describe what we physically see since we do not have a means of efficiently and accurately transcribing the forms. There is too much to describe, let alone determine, what is communicatively salient to the participants as talk unfolds.

“Meaningful” moves can include everything or nothing at all, depending on what the participants notice, depending on what is said or not said, depending on everything we and they can’t see.

Though we do not have an orthography for gesture, or think of gestures as functioning like words, we respond as if they are a part of the spoken or signed code (Enfield, 2009:7; also Chui, 2009). Methodologically, this is an uncontroversial claim for the study of sign languages but for spoken languages, especially in interaction, this will introduce challenges to transcribing spoken discourse with gesture. When describing gestures in terms of their physical compositions instead of glossing them as we do signs, we make a philosophical decision to define them as ephemeral or structurally non-complex which in turn prevents us from recognizing patterns tied to the gestural utterances participants make. Just as there is a range of articulatory flexibility when producing phonemes in words, there is a range of articulatory
flexibility in the gestures people produce. The flexibility, though, as Enfield (2009) shows, is constrained and we have to begin to examine gesture as capable of systematicity.

Some scholars (e.g., Kendon 2004; Ferré 2011) have started to categorize and name gestures that exhibit high degrees of patterning (e.g., the Open Hand Palm Up gesture, pointing with the mouth, deictic eye gaze). I do not know if this is the approach we need take, but I suspect that once we start thinking of gestures as glossable our view of their linguistic status will change. If we are going to move past the traditional view of gesture as ephemeral, not syntactically complex, toward the view that it systematically conveys content in structurally complex ways, then perhaps we have to start by ascribing meaning to these forms in glosses.

To reach the point of transcribing gesture along with spoken utterances, we must begin to strip verbal and nonverbal forms of their respective linguistic/paralinguistic labels (cf. Sicoli 2007) and analyze them for what they contribute to and accomplish in discourse. Enfield’s (2009) composite utterance and Goodwin’s (2007) contextual configuration are useful heuristics for integrating physically disparate forms (e.g., manual gestures with eyebrow raises and co-occurring verbal utterances) into units. Shifting to this reframed view might also encourage more analysts to record spoken data on video, to face the challenge of documenting visible gestures, and to trace out systematic patterns that likely exist. Only then can we begin to see the degree of systematicity spoken-gestural languages exhibit.

7.3.3 Implications for the study of sign language

Conceptualizing of gesture as primarily manual forms that co-occur with speech has influenced the study of gesture in sign language. Most scholars of sign language who have broached the
issue of the gesture-language relationship (Liddell 2003; Emmorey 1999; Cormier et al 2012; Schembri et al 2005) return to Kendon’s Continuum as a starting point for classifying manual gestures in sign. My particular application of interactional sociolinguistics brings the situated context to the fore as one central factor in determining the degree of conventionality exhibited by participants’ constructions. During game play, gesturers produced more iconic gestures when their teammates displayed a lack of comprehension; during conversation, speakers/signers used more interactive forms during task-based exchanges and more depictive forms during longer stretches of explicative discourse. By including the shifting nature of the interaction into the analysis, I was able to show correlated shifts in forms as context-driven.

One contribution of this study to works on sign language is the application of Peircean semiotics where signs are interpreted as a tripartite relation. The progressivity of semiosis, where an interpretant that is generated from perception of a sign-object relation is itself another sign, accounts for how quickly and efficiently deaf people can create seemingly incipient forms (like depicting constructions) and alter seemingly static forms (like the LSF sign VIEUX “old” in Chapter 1) ad hoc. This particular conceptualization of how meaning is generated complements a cognitive linguistic approach to language that has gained favor in sign language research in recent decades. The concept of a nested hierarchy (that Liddell (2003) cursorily employs in his treatment of deixis in ASL) is also useful here. Because there is no direct relation between a sign and its object—the relation is always mediated through an interpretant—so-called static forms can be reinvented anew and incipient forms can take on static properties quite quickly. One of Peirce’s ideas about the dynamic nature of symbols (and all semiotic material) is especially relevant to these data. He says:
"Symbols grow. They come into being by development out of other signs, particularly from icons, or from mixed signs partaking of the nature of icons and symbols. We think only in signs. These mental signs are of mixed nature; the symbol-parts of them are called concepts. If a man makes a new symbol, it is by thoughts involving concepts. So it is only out of symbols that a new symbol can grow. *Omne symbolum de symbolo.* A symbol, once in being, spreads among the peoples. In use and in experience, its meaning grows. Such words as force, law, wealth, marriage, bear for us very different meanings from those they bore to our barbarous ancestors. (CP 2.302)” (quoted in Parmentier 1987:26).

A clear example of the dynamic nature of symbols can be seen in the example I analyzed where John signed GESTURE FOR A WHILE while mouthing “if” and leaning over the table as he was explaining how to play the game to his friend Todd. We can discuss this contextual configuration as driven by specific factors (like preparing to play a game, the physical space in which the participants were seated, John’s emergent stance as rule-reader, and so on) and not be confounded by the fact that his mouthed “if” lacks a co-occurring manual sign. Applying Peirce’s theory, this behavior is not confounding given that humans can create an incredibly wide range of meaningful signs from any number of sources (i.e., that once perplexing broad swath of forms).

This study also shows the richness of examining language in interaction where the exchange between interlocutors has a clear and palpable influence on the creation and alteration of utterances. Research on naturally occurring, multiparty interactions in sign language is scant partly for practical reasons. It is difficult to capture naturalistic sign discourse on video when more than two people are involved. But it is also true that linguists have traditionally focused on sign language’s phonology, morphology and syntax at the expense of discourse-level phenomena. Analyzing individual manual forms like the Open Hand Palm Up or signs like SLOW and VERY-SLOW (Klima & Bellugi 1979) reveals information about linguistic properties of those forms but does not shed light on how or when these forms are used in
utterances embedded in actual speech events. I strongly suspect that the dearth of interactive
data has helped perpetuate ideas about ASL, and the modality at large, especially in terms of a
relationship between gesture and language.

7.3.4 Reframing our view of language

Opening the door on the possibility of treating gesture as linguistic presents additional
theoretical hurdles, one of which is where do we stop at considering body behaviors a part of
language? Mimicry, for instance, can be explained as a social phenomenon: one person sitting
down in a room invites another person to also sit down. But this social behavior encroaches on
language’s territory when interlocutors begin to extract, repeat, and re-articulate each other’s
utterances; the social phenomenon is manifest in linguistic expressions.

I would not go so far as to say that moving a wine glass is part of language. What I am
saying is that the line between gestures that are meaningful and meaningless (or gesture that are
systematized or not) is incredibly difficult to determine (and perhaps analytically useless)
without considering their context. Semiotics provides an avenue for explaining the human
capacity for generating meaning from a wide range of things, which in turn, allows us to
formally incorporate incipient forms into the linguistic fold with conventional ones. Beginning
with this premise and applying interactional sociolinguistics to describe the relationship
between the social and linguistic, the discussion of gesture’s interface with language as a binary
distinction (between static and dynamic, arbitrary and iconic) can shift to discussions of why
participants elect to use certain semiotic processes over others at specific interactive junctures.

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This approach, I believe, will provide a richer understanding of the interface between the coarser notions of gesture and language.

This study begins the discussion of gesture as the possible uniting factor between spoken and sign languages but to develop an integrated framework will require a great deal more work. In the next section, I highlight some of the issues specific to this study that are left unresolved and propose possible next steps for future research.

7.4 Unresolved issues and next steps

Reframing gesture in the way I propose means analysts will need to consider verbal utterances as jointly constructed and as expressed through different articulators depending on conditions established in each speech event. I have incorporated this approach in my study by contextualizing forms as the participants understood them to be used, however I did not conduct playback sessions with participants in either group to collect their own interpretations of the events. In order to gather more insight into the participants’ intentions, in future studies, I would need to interview them while they watched the films of their interactions. People are generally not conscious of how they construct utterances (be those verbal or nonverbal). Playing back the recordings while pointing out specific moves to the participants would help to target “off-record” evaluations, the history of prior dynamics between participants, as well as information about their own understanding of gesture’s role in language. This sort of practice would benefit researchers of gesture in interaction at large to hone in on the subtleties behind stance acts conveyed through gesture.
The particular design of this study did not allow me to directly compare clues performed by each group. In future iterations of the study, controlling the clues that each group performs would allow me to compare gestured strategies between groups to see if, in fact, deaf people benefit from a modality advantage, as I suggested in Chapter 4. Additionally, because I mention possible interactive universals here, it would be worthwhile presenting the sign data to the hearing group and the spoken data to the deaf group much as Ekman & Friesen (1971) did in their study of universal facial expressions. The deaf participants hinted at their own cultural conceptualization of “hearing gestures” in the discussion of the signs TIME and MILK I analyzed in Chapter 4. Since gesture is one of the main means through which hearing and deaf people communicate with each other, interactions between non-signing hearing and signing deaf individuals would be especially potent in efforts to uncover possible universals. This type of interaction is both cross-cultural and cross-modal and regularly occurs within families, between acquaintances/neighbors, and in the workplace. Examining these sorts of interactions I suspect will reveal shifts in gestures akin to code switching based on the familiarity between participants. If gesture is sensitive to the same interactive demands as language, then this would provide more evidence for including gesture into the domain of language.

The readiness with which the participants in my study switched between spoken and gestured utterances strongly suggests that these behaviors are fully integrated in their communicative repertoire. It is the context in which interactants engage that provides the very “stuff” (alliances, interpersonal tensions, personal affiliations, and so on) we so automatically and naturally respond to through and with our bodies. But in order to make conclusions about gesture’s role in language, we must continue to analyze a variety of speech events in which
participants craft these utterances. Collecting multiparty interactions in the workplace, in social settings, as well as in professional milieus will provide richer sources of composite utterances to analyze.

7.5 Conclusion

We use our bodies to communicate ideas and to interact. We signal affiliation with each other, we identify problem spots, and we offer solutions all throughout the unfolding of natural conversation. Reframing how we view this process as a progressive, re-creation of embodied signs allows us to account for how language users incorporate highly schematic, conventionalized forms that are not immutable. Though it appears as though even the most entrenched forms are static, humans continue to invent new forms and reinvent old ones incessantly (a view that is compatible with cognitive linguistics). Sign languages force us to contend with this “in-between-ness” (Streeck 2011), but spoken language linguists will inevitably face the same challenge of accounting for this kind of gradience in linguistic frameworks as it becomes more common to include gesture in the formal analysis of language. Armstrong and Wilcox (2007), in their work on the gestural origins of language, make a compelling argument for considering the embodiment of language as universal. They contend that because higher primates have evolved to rely on vision and social living,

“examining visible gesture is the key to understanding the process by which communication among these animals became increasingly flexible and complex. It is the cultural (and to some extent the coevolved genetic) achievement of the human species to have discovered how to translate the power to represent the world visually into the economical and efficient modality of speech--and to get a glimpse of humans’ visual/ gestural past, one need only look at its vestiges in everyday behavior” (133).
The vestiges of everyday behavior that I examined here, reveal correlates between spoken and sign language reminiscent of the “cultural achievement” these authors describe. Kendon (2008) also interprets the similarities between speech and sign, like the ones I have analyzed, as evidence that gesture and speech are both a part of spoken language. I put this excerpt here to serve as a challenge posed for the next steps we must take as analysts of discourse in both modalities:

"It will be seen that, if 'gesture' is used in this way [where the line between gesture and sign is blurred], and if it is claimed that such 'gradient' or 'gestural' phenomena are integral to the very working of the system as a language, this challenges the idea that there is an opposition between 'gesture' and 'sign.' Further, if it is accepted that such gradient features are integral to how the system functions as a language, this implies that the model of what is to be considered 'linguistic,' as it has often been applied to sign language, must be changed. But this means that the model of what is 'linguistic' in general will have to be changed. The so-called 'gradient' or 'gestural' phenomena that are found to be integral to sign language may, after all, be integral to spoken language as well. The 'paralinguistic' will have to be admitted to the fold of the 'linguistic' and line between what is 'linguistic' and what is not will have to be changed (Liddell, 2003b, Ch. 11; Slobin, 2006, 2008)" (351).

Early linguists of ASL worked hard to justify that it fit into the same theoretical mold as spoken languages. Now that ASL's linguistic status is widely acknowledged, contemporary linguists are faced with having to debunk the very analyses that led to ASL's recognition in the first place. Acknowledging that sign languages exploit gestural resources as much as spoken languages do, means that the linguistic analyses of sign language can liberate spoken language linguists from the bondage of the gesture-speech dichotomy. In all likelihood, the result of these endeavors will be a new definition of what constitutes language.
# APPENDIX 1

## Transcription Conventions

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>g-</td>
<td>gesture</td>
</tr>
<tr>
<td>OH</td>
<td>open hand</td>
</tr>
<tr>
<td>BAF</td>
<td>Back and forth</td>
</tr>
<tr>
<td>PU</td>
<td>palm up</td>
</tr>
<tr>
<td>PD</td>
<td>palm down</td>
</tr>
<tr>
<td>PI</td>
<td>palm in (toward the signer/gesturer)</td>
</tr>
<tr>
<td>PO</td>
<td>palm out (away from the signer/gesturer)</td>
</tr>
<tr>
<td>LH</td>
<td>left hand</td>
</tr>
<tr>
<td>RH</td>
<td>right hand</td>
</tr>
<tr>
<td>NMS</td>
<td>Nonmanual signal (also called nonmanual marker)</td>
</tr>
<tr>
<td>RtL</td>
<td>right to left</td>
</tr>
<tr>
<td>LtR</td>
<td>left to right</td>
</tr>
<tr>
<td>HS</td>
<td>handshape</td>
</tr>
<tr>
<td>MO</td>
<td>mouth</td>
</tr>
<tr>
<td>EC</td>
<td>eye contact</td>
</tr>
<tr>
<td>EG</td>
<td>eye gaze</td>
</tr>
<tr>
<td>&gt;</td>
<td>Marks movement toward</td>
</tr>
<tr>
<td>DV</td>
<td>Depicting Verb</td>
</tr>
<tr>
<td>IV</td>
<td>Indicating Verb</td>
</tr>
<tr>
<td>+</td>
<td>Repetition of a movement in a signed form</td>
</tr>
<tr>
<td>&lt;/?&gt;</td>
<td>Unintelligible discourse</td>
</tr>
<tr>
<td>.</td>
<td>Marks sentence ending</td>
</tr>
<tr>
<td>?</td>
<td>Marks rising intonation</td>
</tr>
<tr>
<td>!</td>
<td>Marks phrase-final emphatic stress</td>
</tr>
<tr>
<td>…</td>
<td>Noticeable pause</td>
</tr>
<tr>
<td>[</td>
<td>Onset of overlapping speech</td>
</tr>
<tr>
<td>Symbol</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>:</td>
<td>Lengthened sound</td>
</tr>
<tr>
<td>xxx</td>
<td>Marks more emphasis than surrounding talk</td>
</tr>
<tr>
<td>x-</td>
<td>Indicates talk is cut off in mid-production</td>
</tr>
<tr>
<td>=</td>
<td>Marks latched speech where there is no pause between turns</td>
</tr>
<tr>
<td>&lt;xxx&gt;</td>
<td>Description of embodied action</td>
</tr>
</tbody>
</table>
APPENDIX 2

Handshape Naming Conventions

open hand    flat hand    mitten    bent mitten    crescent
small crescent    bundle    rounded bundle    fist    thumb
claw    small claw    double hook    hook    beak
trident    closed trident    gun    horns    modified horns
little finger    index    paintbrush    fork    key
ring    modified ring    bent middle finger    cupped hand
REFERENCES


Okrent, A. (2002). A modality-free notion of gesture and how it can help us with the morpheme vs. gesture question in sign language linguistics (Or at least give us some criteria to work with). In Meier, R., Cormier, K. & Quinto-Pozos, D. (Eds.), *Modality and structure in signed and spoken languages* (pp. 175-198). Cambridge: Cambridge University Press.


