

A Microanalysis of Gestures in Classroom Talk¹

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Abstract

This paper examines two types of gestures that are used with speech in teacher and students' utterances in classroom talk. Conversation analysis (CA) is employed to inform the analysis of the teacher's and students' use of gestures. Following Kendon's (2004) classification, we documented the frequency and context of two types of gestures: Type 1, which are gestures matching the meaning of the words being spoken and Type 2, which are gestures extending the meaning of the words being spoken. Comparison between gestures used in the classroom talk and in everyday conversation is also presented to explore how frequently both types of gestures are functioning in these two settings.

Introduction

Within the language classroom, there are often times when learners and teachers alike have a difficult time articulating what it is they are trying to say or explain. For learners, this difficulty may be increased by language limitations. The ultimate goal for learners is to be able to understand and express themselves in the target language. Nonverbal cues, such as gestures, may enable learners to do this. As stated by Kendon (2000), "gestures, as used in partnership with speech, participate in the construction of the utterance's meaning . . . gestures can be used to provide context for spoken expression, thus reducing the ambiguity of the meaning of what is expressed" (as cited in Gregersen et al, 2009, p. 197). Gestures are available as a resource for a speaker who is having difficulty explaining something or understanding something someone else is saying. Language teachers should pay more attention to learners' gesture behavior so that they can be "aware of the use of gesture as part of the overall process of making meaning in the L2" (McCafferty, 2002, p. 201). More specifically, it has been suggested that when using gestures, learners may be able to compensate for their lexical shortcomings, delimit grammatical difficulties, and manage problems relating to fluency (Gullberg, 2008). It is thus important

for teachers to understand how gestures work in classroom discourse.

Gestures in Ordinary Conversations

Gestures are "sensitive to communicative and contextual factors such as visibility between interlocutors" (Gullberg, 2008, p. 278). The internal structure of gesture has three phases: preparation, stroke, and recovery or retraction. The stroke is the core of the gesture where "the movement dynamics of 'effort' and 'shape' are manifested with greatest clarity" (Kendon, 2004, p. 112). The stroke is sometimes followed by a post-stroke hold, which makes gestures "wait" for speech (Gullberg, 2008), both of which carry the meaning of the gesture phrase. The third phase is recovery in which the hand is relaxed or falls back to the resting position.

McNeill (1992) classified gestures into four categories: iconic gestures, metaphoric gestures, deictic gestures, and beats. Iconic gestures are those which function via the structural resemblance to events or objects, for example, saying "he bent the fork almost in half" while making the gesture of grasping and bending something. Metaphoric gestures present an abstract idea or meaning as if it occupied space, for example, presenting an idea while using the hands to act as if the



speaker is holding something concrete. The act of pointing is a deictic gesture, but any part of the body can be used to do this, not just a hand or finger. Finally, gestures made with the hands resembling the beating of time or rhythm are known as beats.

There have been different viewpoints on the relationship between gestures and speech in everyday conversations. For McNeill (1992), gesture and thought work together to form speech: “the speaker’s minimal idea unit... can develop into a full utterance together with

a gesture” (p. 220). Kita, on the other hand, argued that gesture and speech do not derive from a common source, but rather from “two independent (but often tightly coupled) processes” (p. 171). Rather than studying gestures as existing separately from speech, Goodwin (2000, 2003) used the term “embodiment” to refer to gestures as actions occurring within situated interaction. Goodwin (2007) presented embodied participation frameworks as shown in Fig. 1.

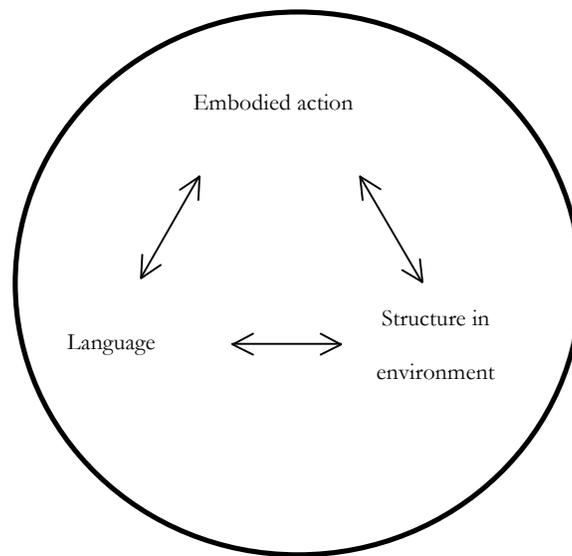


Figure 1. Embodied Participant frameworks (Goodwin, 2007, p. 60)

The three elements displayed in Figure 1, language, structure in the environment, and embodied action, are interconnected as participants build courses of action together. That is, language in use cannot be separated from the physical surrounding that the participants orient to as relevant in the interaction, and it cannot be separated from the embodied actions they perform as they produce language.

Similarly, Schegloff (1984) argued that there is a connection between speakership and hand gestures. He discussed two types of gestures—one relates to the stress or beat organization of the discourse, the other is in the connection with the lexical components of the talk. Schegloff (1984) proposed that

on-stress organization is the mere environment from which gesture is affiliated, and that iconic and locational gestures may occur before the talk they are built for. Along the same lines, Kendon (1985) suggested that gesture and speech should be considered as two connected media of expression, or gesture and speech are partners in the utterance.

Regarding the relationship between gesture and words, Kendon (2004) divided gestures into six types: (1) narrow gloss gestures used with equivalent verbal expression, (2) narrow gloss gestures with non-matching verbal expression, (3) gestures that are semantic specifiers to make word meaning more specific, (4) gestures that

provide an example of what is being said, (5) gestures showing object properties and spatial relationship, and (6) gestures that create objects of reference for deictic expressions (pp. 176-198). An example of a common narrow gloss gesture (Category 1 above) with an equivalent verbal gesture is the act of one rubbing his or her index finger back and forth on the tip of the thumb signaling the concept *money* while the word *money* is spoken. Narrow gloss gestures (Category 2 above) that coincide with non-matching verbal expression are used to help make the words being uttered better understood; for example, someone may explain that two people are very close whilst gesturing by wrapping the middle finger around the index finger to demonstrate the closeness of the two people. Gestures that are semantic specifiers (Category 3 above) are often used to make meaning of, most specifically, verbs and verb phrases more explicit. Speakers using this kind of gesture perform it at the same time as the verb referring to that action is said. Gestures being used to provide an example of what is being said (Category 4 above) can be done with an actual object, or a version of that object can be created, as in picking up the specific object being spoken about, or the person may demonstrate the size of the object being spoken about. An example of a gesture showing object properties and spatial relationships (Category 5 above) could be one describing the shape of a piece of wood while demonstrating the dimensions with his or her hands. Finally, gestures that create objects of reference for deictic expressions (Category 6 above) are similar to the previous example in that the speaker can create the object being discussed by illustrating the object with use of gestures (Kendon, 2004, pp. 176-197).

While Category 1 refers to gestures that map exactly to the meaning of the words being spoken, the other categories refer to gestures that extend the meaning of the words being said. For this reason, in this paper, the focus will be on the contrast between these two main types of gestures. We aim to find out which of these two main types are used more frequently in the language classroom.

Gestures in Second Language (L2) Acquisition And in Classroom Talk

In recent years, researchers have explored the relationship between speech and gestures in the second language (L2) environment to uncover the role of gestures in language acquisition, and suggested that gesture may make input more comprehensible to L2 learners and promote learners' actual learning (Carels, 1981; Seaver, 1992; Allen, 1995; Lazaraton, 2004; Taleghani-Nikazm, 2008, Valenzeno et al., 2002). Specifically, these studies investigated the role of gestures in explaining lexical items and communicating instructions, thus promoting language learning. Lazaraton (2004) explained that nonverbal behavior is a communication strategy and can "function as a replacement of, a support for, and/or an accompaniment to lexical items or referents in discourse" (p. 89). The teaching of lexical items is an example of "situation[s] requiring the explicit deployment of gestures for teaching purposes" (Lazaraton, 2004, p. 89). Furthermore, Canale and Swain (1980) pointed out that nonverbal communication, i.e., gestures, are invoked to aide in learners' strategic competence when breakdowns occur or to "enhance the effectiveness of communication," thus promoting their language learning (as cited in Lazaraton, 2004, p. 80). In addition, McCafferty (2002) suggested that gestures not only promote language learning but also facilitate positive interaction between interactants, helping create a sense of shared social, symbolic, physical, and mental space.

Gestures are also part of teachers' multiple strategies to help students better understand the academic language and content that is being presented in a language classroom. For example, Sime (2006) found that "learners interpret teachers' gestures in a functional manner and use these and other non-verbal messages and cues in their learning and social interaction with the teacher" (p. 211). Sime also mentioned the fact that "conversational or speech-related gestures are always adapted for the addressee in the manner that words are" (p. 212). Thus, learning about student background and culture is important for teachers so that implementation of gestures for student benefits is achieved (Zwiers, 2007, p. 113).

In order to further pursue an understanding of the role of gestures in language teaching and learning, this paper aims to describe the types of gestures used by a native English-speaking teacher in an ESL class. To the knowledge of the authors of this paper, there has been no investigation on the types of gestures used by teachers according to the meaning relationship between the gestures and the words as provided by Kendon's (2004)'s classification. Based on Kendon's classification, we examined the frequency and context of two main types of gestures in the teacher's and students' talk: (1) gestures equivalent to the words being said, or Type 1 gestures, and (2) gestures adding to the meaning of the words being spoken, or Type 2 gestures. Finally, the frequency and context of these types of gestures will be compared with those used in a sample of native speaker (NS) conversation.

Research Questions

The study aims to answer the following questions:

1. How often do the teacher and students use Type 1 and Type 2 gestures?
2. Does the teacher in classroom talk use more or fewer Type 1 gestures than the NSs do in ordinary discourse?
3. Does the teacher in classroom talk use more or fewer Type 2 gestures than the NSs do in ordinary discourse?
4. Do students use more Type 1 or Type 2 gestures in interactions in the language classroom?

Methodology

The classroom data are from an advanced content-based class for students seeking admission to an undergraduate or a graduate degree. The class period was 85 minutes long and the data was a videotape of 24 minutes in the middle of the lesson. There were 22 international adults coming from a variety of countries such as China, Taiwan, Korea, Japan,

Columbia, France, Sweden, and Germany. The teacher and all of the students consented to being videotaped. On the day of videotaping, the students were learning about "Loyalty" and "Diaspora" from the novel *The Accidental Asian*.

The ordinary conversation data was a 25-minute excerpt from a videotape of a group of people having lunch in their office at a Midwestern university. The participants were two professors, a researcher, an office assistant, and a student helper. They were all native speakers of English, with age ranging from early twenties to late sixties.

Both sets of data were transcribed and analyzed based on CA's method (Atkinson & Heritage, 1984; Jefferson, 1989). Close transcription of segments that contain gestures was performed. Gestures were coded as belonging to Type 1 (matching what is being said) or Type 2 (extending the meaning of what is being said). A limitation of this study is that due to logistical constraints, only one of the authors was the coder. Although each set of data was reviewed several times to assure accurate coding, a future study is needed to confirm the findings reported here.

Findings

Teacher's and Students' Employment of Type 1 and Type 2 Gestures

Type 1 Gestures

Recall that Type 1 gestures refer to such gestures serving as equivalent to the words being spoken simultaneously (Kendon, 2004). Below are two segments (Excerpts 1 and 2) in which this type of gestures is used by a student and the teacher, respectively.

In Excerpt 1, the teacher is attempting to elicit more information from students about how to recognize tourists in Waikiki, and a student gives an answer while also gesturing for the word "map."

Excerpt 1: "Looking a map" – Gesture by a student [13:55 to 14:01]

- 1 T: ok, what else?
- 2 C: [°looking a map=
- 3 V: [(RH raises up)]
- 4 V: =°the° way they walk.

5 T: ((looks at S6, then at S5, shakes her hands as if
6 she does not know who to choose, then moves
7 towards, pointing to C with a smile))
8 sorry, Clair,
9→C: looking a map
10 ((~~~~|*****|*****|~~|**

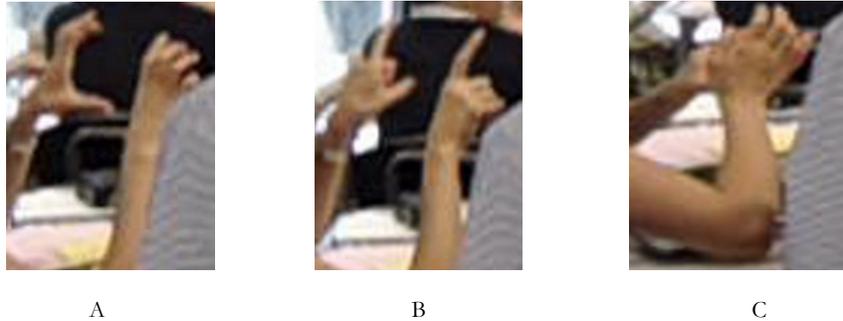


Figure 2. C: “looking a map” (Excerpt 1, line 10)

In line 9, C replies to the teacher’s invitation in line 8 by uttering “looking a map.” In tandem with saying “map,” her elbows rest on the table and both of her hands are in front of her body. She extends her two hands, side by side, palms outwards, each held with the thumb and index finger widely separated but partly flexed (Fig. 2A). By the time the depiction is produced, C is creating an object in the air. In this case, she is outlining the size and the shape of the map she is talking about. The gesture, thus, serves as a physical representation positioned in space and equivalent to the word *map*. The interlocutors may recognize that C is describing the shape of a map occurring simultaneously with the on-going sound “map.” As a result, both of the gesture and the word being said are understood in a more specific way and “the gesture and speech are, thus, *integral components* of the utterance” (Kendon, 2004, p. 116).

After a very brief moment producing both the depiction of a map and the word at the same time, C adds two more gestures, one is another depiction and the other is an enactment to illustrate the meaning of the word *map*, two of which occur after C’s utterance. Similar to the first gesture, which co-occurs with the production of the word *map*, the second one is also a so-called “outline sketching gesture” (Kendon 2004, p. 166). Nevertheless, the form of the hand in the second gesture is different from that of

the first gesture. The thumbs and index fingers are used for the former meanwhile the latter is done with index fingers. C moves her index fingers in a symmetrical fashion, outwards, downwards, and inwards (Fig. 2B). The second gesture also depicts the shape of the map mentioned by C in a well-defined manner, and this makes the shape of the map become clear and distinctive. It seems that C deploys the second gesture to make sure that the shape of the map presented in front of the interlocutors will be clearer and be more understandable. After producing the second gesture, C places her left hand (LH) in front of her chest, held open, palm neutral; her right hand (RH) is held open, palm up, lateral to her LH, she turns it upside down towards her LH. With this motion, thus, C gives a representation of the action of someone holding a paper and folding it (Fig. 2C). In this case, this action appears to enact a form of folding a map with respect to the word *map* being uttered before the action. Thanks to the series of gestures in this utterance, the picture of a map can be observed clearly by the interlocutors.

It is possible that the last two gestures are repairs of the original gesture aiming at (1) providing an alternative representation positioned in space in order that it can be viewed *conspicuously* by the recipients and (2) making the meaning of the verbal expression clear. This series of gestures can be consid-

ered Type 1 gesture because they match the word being said, *map*.

In Excerpt 2, the teacher is moving towards the students while telling them that she

is going to collect their envelopes. To make the word *envelope* more comprehensible, the teacher produces a gesture that represents the meaning of the word.

Excerpt 2: “Envelope” – Gesture by the teacher [00:53 to 00:58]

1 T: ... a:nd I would like to collect your [beau:tiful envelopes
2 → (0.7) right, for today we >created an< envelope,
3 ~~~~~|*****



Figure 3. T: “>create an< envelope” (Excerpt 2, line 2)

In line 3, as the teacher produces “created an envelope,” she is holding her hands laterally in front of her chest. The middle, ring, and little fingers of her both hands are curved slightly. Her thumbs and index fingers are outstretched and widely splayed with palms down. When she says “created,” she moves both of her hands together in a symmetrical way, so that each hand traces an outward path. The stroke of the gesture phrase is performed precisely in association with the verbal utterance “envelope.” That is, the outward movements of both hands are produced in precise association with the word *envelope* and exhibit the shape and the length of an envelope in front of the learners. As a result, this gesture-speech ensemble provides a much more complete picture of the envelope than the word alone.

In brief, the two instances of the teacher’s and the student’s gestures suggest that this type of gesture is used in parallel with words or phrases that are equivalent to them, thus fitting the category of Type 1 gestures. As mentioned above, within the use of Type 1 gestures, there is a semantic relationship with gestures and speech, in which gestures seem to add redundancy to the meaning of the

speech. Nevertheless, what is illustrated in the two examples proves that the picture of a specific object being mentioned may be presented to make the meaning of the word being spoken more specific and complete, which can make the recipients understand better what the speaker is talking about. In the data, there are only two gestures of Type 1 being used by the students (see Appendix A). On the contrary, the teacher produced 29 gestures of the same gesture type (see Appendix B).

Type 2 Gestures

As mentioned earlier in this paper, Type 2 gestures add to the meaning of the verbal component of the turn. The analysis of the two data segments below suggests that the teacher uses these Type 2 gestures in making input more comprehensible to the learners in a content-based lesson. In contrast, the learner uses Type 2 gestures to manage problems relating to fluency as to their output production.

In Excerpt 3, the teacher produces a gesture using an enactment to illustrate the meaning of the word *dud* for a firecracker.

Excerpt 3: “Zzzzl” – Gesture by the teacher [09:40 to 09:58]

1 T: I think of it when on (0.3) >the ↑Fourth of< July:
2 when I have fireworks (0.2) right, sometimes
3 you have a ↑firecracker right then you ↑light it (0.8)

4 you put a match > toward it< and you're (xxxx) BOOM.
 5 → but sometimes (0.7) zzzzl (0.6) °it ↑fizzles out, (0.4)
 6 ((RH ~- *****|-.-.-.-.))
 7 and that they have you g- oh what a dud. (0.4)
 8 right, (0.2) it was a dud.



Figure 4. T: “zzzzl” (Excerpt 3, line 5)

After talking about the Fourth of July and explaining how firecrackers work in lines 1-4, the teacher illustrates the case in which a firecracker does not work in line 5. Before she utters the verbal component “zzzzl,” she moves her right hand towards the left of her body with the palm down, the tips of her right thumb and index finger joined in a form as if she is holding something tiny in her two fingers. This action is produced during a 0.7-second pause after the phrase “but sometimes.” This phase of action refers to the preparation of the teacher’s gesture. In association with saying the sound “zzzzl,” she moves her hand downwards in a series of zigzags as if something in the air is falling down to the ground. Then her right hand opens, with the palm up (Fig. 4). She holds the stroke in a short pause before uttering the verbal component “it fizzles out.” The teacher’s verbal expression “zzzzl” implies the reference of a firecracker in a state of fizzling out. The series of zigzagged-downward movements here seems to be an enactment of the movement of the firecracker as it makes

the sound “zzzzl.” Thus, the gesture adds the meaning to the verbal expression, implying that the firecracker “fizzles out” or it is a “dud.” A “dud” in general can behave in many ways, and the teacher’s gesture makes the feature of being a dud more specific to the case of firecrackers. Interestingly, the gesture and the sound imitation precede the production of the word being explained, *dud*. It seems that the teacher creates the vivid scene that illustrates the word first, something students can see and understand, before introducing the new word. In this way, the gesture and sound are used effectively to unpack word meaning and introduce a new word.

In the next data segment, the teacher is explaining the content of the lesson about the author of *The Accidental Asian*, Eric. After the teacher raised some questions in lines 1-4, a student gives his negative answer in line 6. The teacher wants to elicit more information from the students by posing a cause-effect question in line 7.

Excerpt 4: “Between two nations” – Gesture by a student [05:50 to 06:21]

1 T: ↑↓ye::ah, (1.4) <at fi:rst> (0.4) but what
 2 happened remember his lunch? (0.2) right,
 3 with the: vee ai pee ((VIP)), (0.1) was he happy with
 4 that lunch?
 5 (0.4)
 6 S1: no
 7 T: no:, why not?
 8 (2.0)
 9 S2: ((raises his hand upward))
 10 T: ((looks at S4 and calls the S2’s name))
 11 S2: he ↑changed his ↑mind (xx) with because uhm
 12 (0.6) he don’t want be uhm (0.2)
 13 → between two (0.4) nations (0.4) he don’t want to be
 14 |*****
 15 uhm (1.0) he f- fe- eh he feel like uhm (1.0)

16 ****|*****|
 17 he's not really American,
 18 |*****|
 19 he's not really uhm (0.8) Chinese
 20 |~~~*****|



Figure 5. S2: “between two nations” (Excerpt 4, line 13)

In line 11, after being invited to answer the question in line 10, S2 explains his initial answer from lines 11 to 20. There is a series of four gestures being produced with both of his hands or either his LH or RH in association with his verbal expressions. His verbal discourse conveys that Eric—the narrator in the story—does not want to be in the middle between China and America because he was born in America but his ethnicity is Chinese. This implication is made clear when S2 produces his first stroke (Fig. 5). When uttering the verbal expression “between two (0.4) nations” (line 13), S2 places both hands immediately in front of him, holding them open with the ten fingers outstretched and palms facing one another (Fig. 5). Then he moves his hands laterally back and forth twice in opposite directions. This gesture thus adds meaning to the verbal expression. While the words only mention the gap between the two nations, the gesture indicates the character’s fluctuation between them.

The two instances of the teacher’s and the student’s Type 2 gestures in this content-based classroom suggest that the teacher uses a Type 2 gesture in helping her students understand the meaning of a new word. The student, on the other hand, attempts to elaborate on his meaning with gestures.

In the data, the teacher uses 170 Type 2 gestures compared with only seven Type 2 gestures by the students (see Appendices A

and B). Since Type 1 gestures refer to gestures matching the meaning of the words being spoken, it is perhaps not a surprise that they occur more frequently in the stage of explaining lexical items (see Appendix A). Explanations of lexical items are considered important to help improve learners’ input (Allen, 1995; Lazaraton, 2004). The teacher also uses Type 1 gestures to make the students engage in classroom interaction. Students, it seems, invoke the use of Type 1 gestures so that they are more likely to be understood when they are having difficulty explaining what they are trying to say verbally.

A Comparison Between Gestures Used in Classroom Talk And in Ordinary Conversation
 In order to explore a difference between classroom discourse between a native speaker and ESL learners and ordinary conversations among NSs, 25 minutes of the conversation among university office mates have been transcribed and the focus is on segments that contain gestures. It appears that in the ordinary conversation sample examined, Type 2 gestures were used far more often than in the classroom data, while Type 1 gestures did not occur at all.

Excerpt 5 illustrates a Type 2 gesture in the NS data. In this example, the participants are talking about what Mother Teresa did to help people.

Excerpt 5: “Saving souls” [23:06 to 23:16]

1 P: but what good [is it. I mean you’re not really (1.0)
 2 A: [(°but xxx°)
 3 P: getting people into the Christian church to p- (.)
 4 participate. =they’re gonna d(hh)ie
 5 a[nyway:.
 6 G: [↓SA[VING ↑↓SOU:LS.
 7 → A: [↓but ↑not, she’s ↓SA[VING ↑↓SOU:LS.
 8 ((RH: ~~~~~|****/***|-.--.-
 9 [saving ↑↓souls.



Figure 6. A: “saving souls” (Excerpt 5, line 7)

As A says “saving souls” (line 7), he raises his right forearm upwards, palm vertical, and his right index finger is extended vertically (Fig. 6). This kind of pointing gesture, thus, refers to something going up in the sky. The stroke of the pointing gesture co-occurs with

the verbal expression “souls.” What the gesture does is to indicate that the souls that were saved by Mother Teresa go up to heaven, a notion not explicitly mentioned in speech. Thus, this gesture is a Type 2 gesture.

Table 1
Teacher’s and Students’ Gestures in Classroom Talk vs. NSs’ Gestures in Ordinary Conversation

Types of gestures	Teacher’s gestures	Students’ gestures	NS’s gestures
Type 1	29 (15%)	2 (22%)	0 (0%)
Type 2	170 (85%)	7 (78%)	28 (100%)
Total	199 (100%)	9 (100%)	28 (100%)

As shown in Table 1, there were substantial differences in the use of gestures between the teacher and the NSs. While 16% of the teacher’s gestures were Type 1 gestures, no Type 1 gesture occurred in the ordinary conversation data. The total number of gestures made by students was fewer than both teacher and NS; however, students still made use of Type 2 gestures more frequently than Type 1 gestures. A closer examination of

the gestures used by the teacher reveals that most of the time the teacher uses gestures to explain new concepts or content (see Appendices A and B). Possibly, the gestures used with speech by the teacher could help the students understand the content of the lesson.

Discussion And Conclusion

In summary, this paper employs a microanalysis to examine gestures and their relationship with the verbal discourse in classroom talk. We focused on two types of gestures used by the teacher and learners in a content-based lesson: one is equivalent to the words being said and the other adds meaning to the verbal discourse. The teacher in the data is found to use gestures that match the meaning of the words being said regularly, something that is different from the NS-NS data sample examined. It seems that the teacher's gestures played an important role in facilitating vocabulary comprehension. In this regard, gestures used in the L2 classroom may have the potential to help enhance the learners'

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- Further empirical research should focus on different types of learners' gestures for various purposes and investigate how learners use gestures in relation to speech. This research could help L2 learners produce gesture-speech ensembles effectively. Additionally, it would be relevant for further research to explore learners' gestures in pair-work or group-work in classroom talk. Finally, future research is needed to explore other ways in which gestures in language classroom talk differ from gestures in ordinary conversations among NSs.
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Appendix A

Students' Gestures in Classroom Talk

No.	Type 1 Gestures	Type 2 Gestures
1	"No"	"grow up"
2	"looking a map"	"from the beginning to"
3		"between two nations"
4		"he's not really American, he's not really uhm Chinese"
5		"Scatter"
6		"a (x) of pieces"
7		"like (x) like yellowish"

Appendix B

Teacher's Gestures in Classroom Talk

No.	Type 1 Gestures	Type 2 Gestures
1	"pass these forward"	"a lot of good ideas"
2	"who can tell me"	"put your name on that list"
3	"it devolves so it goes down"	"create an envelope"
4	"Bum"	"Match"
5	"the clothing"	"your envelope"
6	"Face"	"take a look"
7	"Smile"	"Discuss"
8	"that is not"	"on Tuesday"
9	"you too"	"gave him an opportunity"
10	"Booming"	"Right"
11	"No"	"go between"
12	"your book"	"you guys are bridge builders in Bridge program"
13	"looking a map"	"to help negotiate to help"
14	"Picture"	"take a look at the- the specific questions"
15	"the picture"	"these discussions"
16	"Shorts"	"political and government"
17	"akimbo he said arms at akimbo right his arms are like this"	"Devolve"
18	"nice straight teeth"	"what happens"
19	"Scatter"	"grow up"
20	"scatter spread"	"from the beginning to the"
21	"(x) about"	"getting bigger and better"
22	"spreading around the globe"	"started from the organism and the we became apes and then we become man who knows where we were going"
23	"spreading out"	"evolution in the process of growing and expanding"
24	"even though they spread out"	"and becoming better"
25	"come back"	"Evolve"
26	"go out"	"Opposite"
27	"somebody like me for example"	"where you have in this case of discussion"
28	"You"	"and opportunity for negotiation"
29	"I want you"	"that's"
30		"Mere"
31		"what happen remember"
32		"why not"
33		"between two nations"
34		"he's not really American, he's not really uhm Chinese"
35		"ok, exactly"
36		"sides are these"
37		"somebody got this turn around"
38		"he looks Chinese, he looks very Chinese"
39		"Chinese people"
40		"my American perspective"
41		"my Chinese perspective"
42		"Because"
43		"the Chinese guys"
44		"was the American"
45		"a dream for the future"
46		"a distant dream"
47		"too far"
48		"he looks Chinese"
49		"back to his lunch"
50		"high government"
51		"a fire cracker"
52		"light it"
53		"Zzzzz"
54		"do a class"
55		"Long"

56	“he’s a dud”
57	“on both sides”
58	“a little bit positive”
59	“a little bit negative”
60	“a little bit in support of something”
61	“you’re a little bit against something”
62	“which side he’s on”
63	“don’t be so wishy-washy”
64	“say in the middle of the road”
65	“don’t be ambivalent”
66	“this trip”
67	“give you an overview”
68	“twenty one”
69	“search to know”
70	“a description”
71	“Himself”
72	“in China”
73	“one seventeen”
74	“let me ask you”
75	“when you’re in Waikiki”
76	“their neck”
77	“Sunburn”
78	“the way they look”
79	“ok when they speak”
80	“you’re all international and you speak with different accents”
81	“right you said Waikiki”
82	“in Waikiki”
83	“some of you”
84	“tourists will be”
85	“Talking”
86	“live here”
87	“what’s your point”
88	“Ok”
89	“Nonverbal”
90	“not walking towards their destination”
91	“have shopping bags”
92	“coffee pineapples”
93	“Exactly”
94	“Eric mentioned”
95	“looks like he belongs, right, he’s Chinese”
96	“that’s not”
97	“Context”
98	“where and when”
99	“Here”
100	“Gate of Heavenly Peace”
101	“so there you can tell that’s a foreign destination”
102	“Wearing”
103	“Birkenstocks”
104	“you know what Birkenstocks are”
105	“in China”
106	“American college students wore then”
107	“dental care in America is pretty good”
108	“Braces”
109	“something else”
110	“Exactly”
111	“(not) explainable”
112	“Hard”
113	“met in America”
114	“he was born in America”
115	“if his mother and father had not met”
116	“Accident”
117	“match the plan”
118	“in your country”

119	“have met as they were students studying abroad”
120	“look exactly”
121	“Bearing”
122	“Ideas”
123	“to diaspeirein”
124	“Feeling”
125	“makes people think they should come back”
126	“Live”
127	“feel no matter where they live”
128	“that Chinese diaspora”
129	“may be”
130	“do you want to say about that”
131	“feel than the sense of commitment”
132	“a connection for him”
133	“born in Chinese”
134	“I am Chinese”
135	“especially because I have these things”
136	“the first one (XX)”
137	“how to pronounce it”
138	“Ok”
139	“out there”
140	“do you want to add”
141	“to that”
142	“Asia”
143	“like (X)”
144	“that should be important for him”
145	“want to do business in China”
146	“and you have Huaren and Guanxi”
147	“Belong”
148	“look like you belong”
149	“do you want”
150	“a network”
151	“of your identity because of your ethnicity”
152	“you might have”
153	“someone from the outside”
154	“the old boy network”
155	“the old school network”
156	“go to certain schools here”
157	“give you a job as someone’s business”
158	“if the owner of that company”
159	“common in other cultures too”
160	“have a connection”
161	“other Chinese people who are going out”
162	“it’s very very strong”
163	“Any”
164	“Call”
165	“think about your own identity”
166	“overseas in Chinese”
167	“Important”
168	“contact me”
169	“a little bit louder”
170	“a kind of sandals”

Appendix C

NSs' Gesture in Ordinary Talk

No.	Gestures matching the meaning of words being spoken	Gestures adding meaning of the words being spoken
1		"Fifteen"
2		"stretch it"
3		"oh yea"
4		"this stuff here say like a"
5		"next door"
6		"around the corner"
7		"here's (XX) you go around the rock other set (X) the same tch"
8		"I (XXX) and met you"
9		"oh and this is ok I actually got the (X) password"
10		"it won't happen again this fall semester"
11		"the green green turns red"
12		"more longer"
13		"here than she can there"
14		"the sign right up the door out of here"
15		"well this is the same place"
16		"in here"
17		"oh that I don't know because it's officially discussed"
18		"it's a Thai it's a Thai"
19		"that makes perfect sense"
20		"I thought (XX) I'm like (X)"
21		"Creakier"
22		"This has"
23		"cream berry than just berry one"
24		"dip the Oreo cookies in the milk"
25		"you know"
26		"what's happening to"
27		"she's saving souls"
28		"they go up do on the water"

Transcription Conventions

.	falling intonation
?	rising intonation
,	slightly rising intonation
↑	rising pitch in the next phrase
↑↓	pitch rises and falls within the next word
:	lengthened speech
=	latching
xxx-	cut off word
<u> </u>	stressed syllable
superscript zero°	beginning and end of softer speech
(x)	inaudible word
[beginning of overlap of speech, or speech and non-verbal
action	
> <	sped up speech
< >	slowed speech
(number)	duration of silence in seconds
(())	nonverbal actions
→	a feature of interest to the analyst
~	preparation of a gesture phrase
*	stroke of a gesture phrase
-.-. .	home position or retraction
LH:	left hand
RH:	right hand