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Gesture and Gaze as Embodied Communicative Modes in EFL Classroom Interaction: A Multimodal Discourse Analysis

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Abstract

This study investigates how gesture and gaze operate as embodied communicative modes in English as a Foreign Language (EFL) classroom interaction. Drawing on Sigrid Norris' Multimodal Interaction Analysis (MIA) framework, the study examines the question: How do gesture and gaze function as embodied communicative modes in EFL classroom interaction? Using video-recorded data from naturally occurring classroom instruction at a senior high school in Medan, Indonesia, this qualitative study employs multimodal transcript analysis to identify lower-level actions and higher-level pedagogical activities in which gesture and gaze are deployed. Six interaction episodes were selected and analyzed in detail with reference to their temporal positions and interactional contexts. Findings reveal that gesture functions to demonstrate bodily knowledge, affirm student performance, regulate participation, and scaffold comprehension, while gaze serves primarily to monitor engagement and direct attention. Both modes operate dynamically within higher-level instructional actions and exhibit varying degrees of modal density depending on pedagogical purpose. The study contributes empirical evidence to the growing body of multimodal research in language education and underscores the need to treat gesture and gaze as indispensable semiotic resources in EFL pedagogy.

1. Introduction

Communication in face-to-face interaction has long been recognized as a fundamentally multimodal process. Rather than being transmitted exclusively through spoken words, meaning is jointly constructed through the coordinated deployment of multiple semiotic resources, including gesture, gaze, posture, body orientation, and spatial movement (Goodwin, 2000; Kress, 2010; Norris, 2004). This understanding has prompted a significant reconceptualization of classroom discourse analysis, moving beyond linguistic transcription to capture the full embodied and material dimensions of teaching and learning.

In English as a Foreign Language (EFL) classrooms, the significance of embodied communication is amplified. When learners possess limited linguistic resources, teachers increasingly rely on bodily modes to scaffold comprehension, organize participation, and maintain instructional clarity (Walsh, 2011). Among the various embodied modes available to teachers, gesture and gaze occupy particularly prominent analytical positions. Gesture provides visual, imagistic representations of meaning that complement and extend verbal explanation (McNeill, 1992, 2005), while gaze structures participation frameworks, signals epistemic stance, and regulates turn-taking within classroom interaction (Goodwin, 2000; Kääntä, 2010).

Despite growing scholarly interest in multimodal interaction, empirical studies focusing specifically on how gesture and gaze are deployed as pedagogical tools in live, face-to-face EFL instruction remain limited. Many existing studies examine online learning environments (Querol-Julián, 2022), concentrate on students' multimodal engagement (Wilmes & Siry, 2021; Kang et al., 2018), or adopt broad social semiotic frameworks that do not systematically track the hierarchical structure of embodied actions across interactional moments (Indrapuri & Perdana, 2021). This study addresses this gap by applying Sigrid Norris' (2004, 2011) Multimodal Interaction Analysis (MIA) framework to video-recorded EFL classroom data to examine the interactional and pedagogical functions of gesture and gaze.

The study is guided by the following research question: How do gesture and gaze function as embodied communicative modes in EFL classroom interaction? By attending to lower-level and higher-level actions, as well as modal density, the analysis reveals how these two embodied modes are strategically integrated into the teacher's instructional repertoire to accomplish a range of pedagogical objectives.

The remainder of this article is structured as follows. Section 2 situates the study within relevant theoretical and empirical literature on multimodality, embodied communication, and classroom interaction. Section 3 describes the methodological design, data collection procedures, and analytical approach. Section 4 presents and discusses the findings through detailed analysis of six classroom interaction episodes. Section 5 concludes the study and outlines implications for EFL pedagogy and future research.

Literature Review

Multimodality and Embodied Communication

Multimodality refers to the study of how multiple semiotic modes are combined and coordinated in the production of meaning (Kress & van Leeuwen, 2001; Jewitt, 2009). From a social semiotic perspective, meaning is not located within any single mode but emerges from the dynamic interplay of modes, each carrying its own affordances, or meaning potentials, that contribute differentially to communicative outcomes (Kress, 2010). Spoken language, though historically privileged as the primary channel of communication, is understood within multimodal theory as merely one among many equivalent resources.

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Embodied communicative modes constitute a central category within multimodal research. These are meaning-making resources realized through the human body in interaction, including gesture, gaze, facial expression, posture, body orientation, and movement in space (Norris, 2004; McNeill, 1992; Kendon, 2004). Rather than functioning as mere accompaniments to speech, embodied modes are integral to meaning construction in situated interaction. In educational contexts, where teachers must simultaneously manage content delivery, participation structure, and interpersonal relations, these modes are particularly consequential.

McNeill (1992, 2005) demonstrates that gesture and speech form a tightly integrated communicative system. Gesture expresses imagistic and spatial dimensions of thought that often cannot be fully captured by verbal language alone. He classifies gestures into four main types: iconic gestures, which visually represent concrete objects or actions; deictic gestures, which indicate specific referents or directions; metaphoric gestures, which provide physical form to abstract concepts; and beat gestures, which align with the rhythmic and prosodic structure of speech. In classroom contexts, these gesture types perform distinct pedagogical functions, ranging from vocabulary scaffolding and attention direction to emphasis marking and discourse organization (Roth, 2001; Gullberg, 2006).

Gaze, meanwhile, is recognized as a critical resource for organizing social participation. Goodwin (2000) argues that gaze establishes joint attention, aligns participants within interactional frames, and regulates the sequential organization of turns. Haddington (2006) further elaborates that gaze is closely intertwined with evaluative and epistemic actions, functioning as a resource for displaying alignment, disagreement, or stance. In classroom settings, teachers deploy gaze strategically to monitor student engagement, allocate turns, signal expectations, and coordinate the production and reception of instructional content (Kääntä, 2010).

Multimodal Interaction Analysis

The analytical framework adopted in this study is Sigrid Norris' (2004, 2011) Multimodal Interaction Analysis (MIA). Developed in response to the limitations of purely linguistic approaches to interaction, MIA conceptualizes social activity as a mediated action accomplished through the coordinated use of multiple semiotic modes. A central theoretical distinction in MIA is between lower-level actions and higher-level actions.

Lower-level actions are the smallest analytically distinguishable units of interaction, each realized through a single communicative mode at a particular moment in time (Norris, 2004). Examples include a single gaze shift, a pointing gesture, a nod, or the utterance of a word. Despite their brevity, lower-level actions are analytically significant because they reveal how participants orient to each other and to their environment through discrete bodily and semiotic acts.

Higher-level actions, by contrast, are more complex and extended units of social interaction formed through the organization of multiple lower-level actions (Norris, 2004). These are socially recognizable activities such as explaining a concept, giving instructions, eliciting student responses, or managing classroom behavior. Higher-level actions are inherently multimodal, depending on the simultaneous or sequential coordination of multiple modes to achieve their communicative purposes. The meaning of a higher-level action cannot be reduced to any single mode but must be analyzed as an integrated multimodal accomplishment.

Modal density is a further key concept in MIA, referring to the intensity and complexity of modal orchestration within a given interactional moment (Norris, 2004). High modal density characterizes moments in which multiple modes are tightly coordinated and simultaneously foregrounded, typically arising during complex

pedagogical activities such as vocabulary explanation, concept clarification, or behavioral management. Low modal density, by contrast, involves fewer or less prominent modes. Modal density is not fixed but fluctuates dynamically throughout interaction in response to shifting pedagogical demands.

Previous Studies

Several empirical studies have examined multimodal interaction and embodied communication in educational contexts. Wilmes and Siry (2021) applied MIA to investigate plurilingual students' engagement in science classroom practices, demonstrating that embodied resources such as gesture, gaze, and body orientation were indispensable to participation and meaning-making processes. Kang et al. (2018) explored how full-body gestures within an embodied science simulation contributed to collaborative problem-solving and conceptual understanding, reinforcing the theoretical position that cognition and embodiment are inseparable.

In language education, Querol-Julián (2022) examined how a lecturer in an English-medium instruction context deployed verbal and non-verbal semiotic resources to manage participation in online lectures, finding that even in digital environments, gaze and gesture remained essential tools for interactional organization. Indrapuri and Perdana (2021) analyzed classroom presentation videos in an Indonesian context, demonstrating that gaze, posture, and gesture significantly shaped students' communicative performance and interactional engagement.

While these studies collectively affirm the centrality of embodied communication in educational interaction, several gaps remain. First, relatively few studies focus specifically on teacher gesture and gaze as pedagogical resources within face-to-face EFL instruction. Second, existing Indonesian-context studies tend to adopt broad social semiotic frameworks rather than MIA's hierarchical action analysis, resulting in limited attention to the micro-level alignment between embodied lower-level actions and their higher-level pedagogical outcomes. The present study addresses both gaps by applying Norris' (2004, 2011) MIA framework to authentic EFL classroom video data in an Indonesian secondary school context.

2. Method

Research Design

This study adopts a qualitative case study design, which is appropriate for conducting in-depth, naturalistic examination of multimodal interaction in a specific educational context (Lincoln & Guba, 1985). A case study approach allows for the sustained analysis of a single teacher's embodied communicative practices across multiple classroom sessions, enabling identification of recurring patterns and interactional strategies without the methodological distortions introduced by experimental manipulation.

Research Site and Participant

The study was conducted at SMA Unggulan Al-Azhar Medan, a senior high school in Medan, North Sumatra, Indonesia. For ethical considerations, the identities of all participants are anonymized, and informed consent was obtained prior to data collection. All data are used exclusively for academic research purposes.

The primary participant is one experienced female English teacher with approximately 25 years of EFL teaching experience. This selection was deliberate: an experienced teacher is expected to exhibit well-developed and pedagogically systematic embodied communication strategies, including principled deployment of gesture and gaze in classroom interaction. Focusing on a single teacher across multiple sessions also ensures

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analytical consistency while generating rich and representative data on embodied communicative practices.

Data Collection

Data were collected through non-participant classroom observation using video recording. Five EFL classroom sessions were recorded across different meeting days during regular instruction. A video camera was positioned at a fixed location within the classroom to capture the teacher's full body movements, gesture trajectories, gaze directions, posture, and spatial positioning. Both visual and audio channels were recorded to enable comprehensive multimodal analysis.

Following Norris' (2011) guidance on video-based multimodal data, recordings were reviewed repeatedly. Six interaction episodes were selected for focused analysis based on their analytical salience, including clear instances of gesture and gaze deployment within specific instructional activities. Episodes were selected to represent a range of pedagogical contexts, including explanation, questioning, turn management, and monitoring.

Data Analysis

Analysis followed the systematic procedures outlined in Norris' (2004, 2011) MIA framework. First, all five video recordings were reviewed to catalogue observable embodied modes, identifying gesture and gaze instances as lower-level actions alongside their co-occurring speech and behavioral context. Second, lower-level actions were analyzed in clusters to identify the higher-level pedagogical activities they collectively realized, such as vocabulary demonstration, turn elicitation, or student monitoring. Third, modal density within each episode was assessed by examining the degree to which gesture and gaze were simultaneously foregrounded or backgrounded relative to verbal speech and other communicative modes.

Trustworthiness was ensured through credibility (prolonged engagement with data, detailed multimodal transcription, and comparison across episodes), dependability (systematic documentation of analytical decisions in line with MIA procedures), and confirmability (grounding all interpretations in observable, timestamped video evidence rather than researcher inference; Lincoln & Guba, 1985).

3. Result and Discussion

The analysis identified six interactional episodes in which gesture and gaze functioned as central embodied communicative modes within the teacher's instructional practice. The episodes span different pedagogical activities and demonstrate how these two modes are deployed with varying degrees of modal density to accomplish distinct higher-level instructional actions. Each episode is presented with its temporal position in the recording and analyzed in terms of the lower-level actions involved, the higher-level action they constitute, and the communicative function served.

Gesture as an Embodied Communicative Mode

Demonstrating Bodily Knowledge Through Iconic Gesture

At timestamp 05:27, the teacher poses a rhetorical question to the class about behavioral indicators of lying, specifically identifying eye-blinking as a physical manifestation of deception. Crucially, this verbal explanation is accompanied by an iconic gesture in which the teacher visibly demonstrates the blinking action, enacting the referent of her speech with her own body. The verbal and gestural channels operate in tight coordination, each reinforcing the other while contributing distinctly to the meaning-making process.

[05:27] *"Who's like to do it when they lie? Blinking the eyes." Teacher performs eye-blinking gesture, enacting the body language of deception.*

In terms of MIA, the teacher's verbal utterance and the accompanying iconic gesture constitute two simultaneous lower-level actions realized through speech and gesture respectively. Together, they contribute to a higher-level action of vocabulary illustration through embodied demonstration. The gesture does not merely repeat the content of the speech; rather, it provides an imagistic, concrete representation of a concept that the verbal channel alone cannot fully render in an EFL instructional context. This aligns with McNeill's (1992) account of iconic gestures as expressing the visual and kinesthetic dimensions of thought that complement verbal language.

Modal density at this moment is relatively high, as gesture and speech are simultaneously foregrounded and tightly integrated. The teacher's deployment of iconic gesture in this context reflects a deliberate pedagogical strategy: by making the concept visible through bodily enactment, the teacher creates a multimodal anchor for learners whose lexical access to the concept may be limited. This finding corroborates Roth's (2001) observation that iconic gestures in classroom instruction scaffold comprehension by providing embodied representations of content knowledge.

Affirming Student Performance Through Gestural Applause

[09:45] *"You never tell a lie?" Teacher directs applause gesture toward a student as an expression of positive affirmation.*

At timestamp 09:45, the teacher addresses a student with a question implying that the student does not engage in deception, while simultaneously performing an applause gesture directed toward that student. This gesture functions not as an iconic representation of content knowledge, but as an expressive and interpersonal communicative act that publicly affirms the student's behavior or character.

The applause gesture at this moment constitutes a distinct lower-level action in the gesture mode, co-occurring with the teacher's evaluative verbal utterance. Together, these lower-level actions realize a higher-level action of positive student appraisal, an act of public recognition and encouragement. The gestural component amplifies the affective force of the verbal evaluation by translating it into a socially legible form of approval that is visible to the entire class.

The modal density in this episode is moderate: gesture and speech are coordinated, but the gesture here carries interpersonal rather than referential meaning, functioning primarily to reinforce the evaluative stance indexed by the teacher's words. This aligns with Haddington's (2006) account of gaze and bodily action as resources for stance-taking, and extends it to gesture as an equally important stance-marking resource. Pedagogically, the public and visible nature of the applause gesture contributes to a positive affective climate

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within the classroom, reinforcing student engagement and participation willingness (Jewitt, 2008).

Directing Attention Through Deictic Gesture

At timestamp 13:46, the teacher poses a question directing a student to identify a concept associated with the word displayed or discussed in the instructional context. The deictic character of the accompanying gesture functions to nominate a specific student or direct the class's shared attention toward a particular referent, organizing the participation structure of the question-answer sequence.

[13:46] *"What is it?" Teacher deploys questioning gesture toward a student in conjunction with a vocabulary elicitation prompt.*

The gesture at this moment constitutes a lower-level deictic action that co-occurs with the verbal interrogative form, together realizing a higher-level action of student nomination and comprehension elicitation. The gesture is analytically significant because it does not merely duplicate the verbal question; rather, it specifies the recipient of the question and the direction of expected attention. Without the gestural component, the verbal question alone would not fully determine who is expected to respond or what precisely is being pointed to.

Modal density at this moment is moderate, with gesture and speech jointly foregrounded. The deictic function of the gesture extends the teacher's verbal elicitation by organizing the participation framework of the interaction. This finding resonates with Goodwin's (2000) account of how pointing and gaze work together to establish joint attention and allocate interactional roles, and with Kääntä's (2010) findings on how teachers use embodied modes to manage student participation in classroom discourse.

Managing Participation Through Deictic Instruction

At timestamp 14:03, the teacher issues a participatory directive instructing students to signal their intention to respond by raising their hand. This utterance functions as a regulatory move within the ongoing question-answer sequence, organizing the mechanics of participation. The verbal directive may be accompanied by a corresponding gestural demonstration or pointing action, reinforcing the instruction through a parallel embodied channel.

[14:03] *"Raise your hand." Teacher issues a participatory directive, managing turn-taking through a combination of verbal instruction and gestural cue.*

In MIA terms, the teacher's verbal directive and the accompanying gestural cue constitute coordinated lower-level actions that together realize a higher-level action of participation management, specifically, the establishment of a turn-taking protocol. This

type of regulatory action is characteristic of classroom interaction, in which institutional norms for speaking rights must be made explicit to learners. The embodied mode serves to make the expected participatory behavior visible and unambiguous, particularly for learners at varying levels of linguistic proficiency.

The modal density in this episode is notable for its functional orientation: unlike episodes where modal density is driven by the complexity of content being explained, here the coordination of verbal and gestural modes is driven by the need to regulate social participation. This distinction aligns with Norris' (2004) observation that modal density fluctuates not only in response to content complexity but also in response to the interactional demands of different instructional phases.

Scaffolding Conceptual Understanding Through Metaphoric Gesture

At timestamp 15:02, the teacher makes a conceptual claim about the physiological effects of deception, asserting that lying produces an increase in bodily energy. This claim is delivered with a gestural component that physically enacts the concept of increasing energy, likely through an upward or expansive hand or arm movement that visually represents the growth or intensification being described.

> ***[15:02]*** *"It increases our energy, right?" Teacher frames a physiological claim about deception through a gesture that physically enacts the concept of energy increase.*

This gesture functions as a metaphoric gesture in McNeill's (1992) typology: it gives physical form to an abstract concept, the idea of energy increase, by mapping it onto a concrete spatial trajectory. The verbal and gestural channels operate in complementary fashion, with speech carrying the propositional content and gesture providing an imagistic representation of the conceptual structure underlying that content.

The lower-level actions of speech and metaphoric gesture combine here to realize a higher-level action of conceptual explanation. The modal density is moderate to high, reflecting the teacher's reliance on gesture to supplement the verbal channel in communicating an abstract physiological concept to EFL learners. This pattern is consistent with Gullberg's (2006) findings on the role of metaphoric gesture in scaffolding abstract concept comprehension in language learning contexts.

Gaze as an Embodied Communicative Mode

Monitoring Engagement Through Sustained Gaze

The final episode, occurring at timestamp 36:56, is analytically distinctive in that it involves no verbal speech. The teacher directs and maintains sustained gaze toward a student who is engaged in reading the textbook. This episode exemplifies gaze functioning as a primary communicative mode in the absence of speech, rather than as a secondary resource supplementing verbal delivery.

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[36:56] *(no verbal speech) Teacher sustains gaze toward a student engaged in reading the textbook, performing a monitoring function without verbal accompaniment.*

The sustained gaze at this moment constitutes a lower-level action realized entirely through the gaze mode. It contributes to a higher-level action of student monitoring, a recurrent pedagogical activity in which the teacher oversees learner task engagement to assess comprehension, ensure on-task behavior, or decide whether to intervene verbally. The absence of speech at this moment is significant: the teacher's gaze accomplishes the monitoring function without disturbing the student's reading activity, thereby managing the instructional space in a minimally intrusive manner.

Modal density in this episode is notably low relative to the other episodes analyzed. Only a single mode, gaze, is foregrounded. This reflects Norris' (2004) observation that low modal density is associated with routine or transitional interactional moments where the primary communicative goal is simple and does not require the coordination of multiple modes. The teacher's deployment of gaze alone to perform monitoring also demonstrates that gaze can function as a fully sufficient communicative resource in particular interactional contexts, without requiring verbal or gestural amplification.

Goodwin's (2000) account of gaze as a resource for establishing shared attention and monitoring participation is directly applicable here. By sustaining gaze toward the reading student, the teacher maintains awareness of the student's engagement state and implicitly signals institutional oversight without disrupting the pedagogical activity in progress. This use of gaze as a silent monitoring tool is consistent with Kääntä's (2010) findings on how EFL teachers deploy gaze to regulate participation and manage classroom activities.

Summary of Findings

Across the six episodes analyzed, gesture and gaze were found to function as distinct but complementary embodied communicative modes within the teacher's instructional repertoire. Gesture was deployed in five episodes and served a range of pedagogical functions: iconic gestures demonstrated body knowledge and scaffolded vocabulary comprehension (05:27; 15:02); an expressive applause gesture performed interpersonal appraisal and affective affirmation (09:45); and deictic gestures directed student attention and organized participation structure (13:46; 14:03). Gaze appeared as a primary communicative mode in the sixth episode, functioning as a silent monitoring resource that maintained teacher awareness of student engagement without verbal intervention (36:56).

Modal density varied systematically across episodes in relation to pedagogical purpose. Highest modal density was observed during complex explanatory and demonstrative actions (05:27; 15:02), where gesture and speech were tightly integrated to scaffold conceptual understanding. Moderate density characterized participatory management episodes (13:46; 14:03; 09:45), where gesture supplemented verbal directives or evaluative utterances. The lowest density was observed in the monitoring episode (36:56), where gaze alone sufficed to accomplish the interactional goal.

These findings collectively demonstrate that gesture and gaze are not supplementary or peripheral to EFL instruction but constitute indispensable semiotic resources through which a range of higher-level pedagogical actions, including explanation, evaluation, participation management, and monitoring, are multimodally accomplished.

5. Conclusion

This study has investigated how gesture and gaze function as embodied communicative modes in EFL classroom interaction, guided by the research question: How do gesture and gaze function as embodied communicative modes in EFL classroom interaction? Applying Norris' (2004, 2011) Multimodal Interaction Analysis framework to video data from six naturalistic classroom episodes at a senior high school in Medan, Indonesia, the study has produced a number of theoretically grounded and empirically detailed findings.

Gesture was found to serve multiple distinct pedagogical functions depending on its type and sequential position within interaction: iconic and metaphoric gestures scaffolded comprehension and conceptual understanding; deictic gestures directed attention and organized participation; and expressive gestures performed interpersonal affirmation. Gaze, meanwhile, functioned primarily as a monitoring and attention-management resource, capable of accomplishing interactional work in the complete absence of verbal speech. The two modes operated with varying degrees of modal density, reflecting the dynamic adjustment of multimodal resources in response to shifting instructional demands.

These findings contribute to the theoretical understanding of classroom interaction as a multimodal and embodied social practice. They confirm that meaning in EFL instruction is not conveyed through language alone but is jointly constructed through the strategic orchestration of bodily resources across time. Methodologically, the study demonstrates the value of MIA's hierarchical action analysis for investigating embodied communication at both micro and macro levels of interaction, producing more granular and analytically rigorous accounts of classroom discourse than broad social semiotic approaches alone.

Pedagogically, the findings underscore the importance of teacher awareness regarding embodied communicative practices. Teacher education and professional development programs in EFL contexts would benefit from explicitly incorporating attention to gesture and gaze as pedagogical tools, particularly for learners at lower proficiency levels where verbal scaffolding alone may be insufficient.

Several limitations should be acknowledged. The study is based on a single teacher and a limited number of episodes, which restricts generalizability. Future research should examine larger corpora of EFL classroom video data from diverse institutional contexts to establish broader empirical patterns. Comparative studies examining both teacher and student embodied modes would also enrich understanding of how gesture and gaze function reciprocally within classroom interaction. Additionally, longitudinal research tracking changes in teachers' embodied communicative practices across career stages could illuminate the relationship between professional experience and multimodal instructional competence.

In conclusion, gesture and gaze are not peripheral accompaniments to EFL classroom talk; they are integral semiotic resources through which teachers accomplish the pedagogical work of explanation, appraisal, participation management, and monitoring. Recognizing and systematically analyzing these embodied modes is essential to developing a comprehensive understanding of language classroom interaction as a fully multimodal social practice.

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