“I Mean You Can Stop. I Already Understand You”: Head Tilts during Conversations

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Abstract
This study tried to shed light specifically on head gestures which are categorized as upward tilts, downward tilts, leftward tilts, rightward tilts, nods, shakes, and turns. This study is qualitative in nature since the data quality is considered as the focal importance in generating the results as well as the conclusions. The data collection was carried out through observation and interviews involving 2 respondents in two different topic rounds. Hence, the instruments are observation sheets, documentations, and interview guides. The data from observation (in the form of videotapes) were analyzed using visual thematic coding, while the interview data were analyzed using interactive analysis. The results unveil that in argumentation topic, respondents tend to perform more turning head movement, both right turn and left turn. Meanwhile, in discussion topic, the respondents performed more of nodding and upward tilt. It can be concluded that head movements performed by interlocutors depend on the types of topic(s) they are engaged in. It implies that in teaching and learning process, teachers can use this information to ensure the situation during material explanation to see whether the students agree, disagree, understand, or confused with the explanations.

Keywords: nonverbal communication, nonverbal language, head gestures, head tilts, and pragmatics.

INTRODUCTION
Communication is a means of information transfer employed among humans to harbor interactions with disparate purposes. Verbal enunciation is mostly recognized to convey meanings in concrete ways. Words can deliver meanings as they are eloquently carried out in appropriate grammatical structures and word choices. What is not less important in communication is the non-verbal communication. As suggested by Tripathi and Reddy (2012) that communication implies the most common way of sharing information and comprehension among and between individuals. Communication additionally happens in the classrooms as well, where
the most common way of sharing information from the teachers to students and among the students themselves. Classroom interactions happen through talks and communications. As the result, numerous issues show up in the teaching and learning process faced by the teachers and students, particularly in making informative and instructive interactions during the teaching and learning process. The majority of students still have a few inconveniences in articulating their thoughts. It is demonstrated by their lack of lexicons, poor communication, limited grammar, and for the most part the teacher experiences issues in clarifying the material that makes students cannot comprehend. The fundamental interest in the classroom cooperation is to urge students to utilize their language and interactional abilities. The decisions made by teachers can harbor the interactions among students leading to learning process.

Upon making dialogues, interlocutors are interrelated on the use of their speech. For example, when people talk on the phone, they can speak naturally and mutually understand each other although without looking at each other. Nonetheless, upon making face to face conversations, people rely solely on the use of gestures, facial expressions, head movements, and tones of voice. There is a mere difference between linguistics and non-linguistics behaviors when people are engaged in verbal and non-verbal communications. In verbal communications, there are standardized rules to obey such as the use of proper word choice and correct grammatical constraints. Meanwhile, there are no standard rules in non-verbal communication, involving majorly non-linguistics behaviors (Watanuki & Togawa, 1995). When human interacts through conversation, the clearest indication that they are interacting is the head movements. The movements can be upward, backward, downward, tilting left or right, nodding, shaking, turning, or even no movements at all. And more importantly, there are messages that can be obtained from this head movement alone, letting alone the speech and linguistic properties. Research has shown that the majority of speech analysis based the investigation on auditory transcriptions. Very little research has come into the natural state of conversation, which is the employment of non-verbal languages. This study tries to give insight on human communication without involving the auditory elements but relying solely on the visual elements—head movements. This is considered significance in the area of teaching and pedagogy because it is definitely helpful for, especially, teachers and students altogether. As a matter of fact, during classroom explanation, most students cannot understand the materials delivered by the teachers immediately (Hall, 2006) but they have no courage to find out the query towards the teacher for various inhibitive reasons.

The purpose of this study is to see whether there are differences in head movements during student-student conversation when different topic is assigned. One topic used was of discussion purpose and the other one is of argumentative purpose. This study is considered significance both theoretically and practically. Practically, the insight on head movement patterns can help teachers in teaching and learning process, especially in dealing with introverted or socially-hindered students. Most problems in classroom occur among this type of students as they are overly conservative in even ask questions about the materials they do not understand. The patterns of head movements found in this study can give raw depictions on non-verbal communication taking place in classroom settings, where teachers are mostly engaged together with the students. Meanwhile theoretically, this study initiates concurrence on the integration of pedagogy and communication. As adding new insights and propositions on the onthology of interdisciplinary research subject in regards teaching and learning.
Related studies have been compared in order to provide deeper depiction on the rationale for this study. In Livingstone & Palmer (2015), the employment of head gestures related to emotion while singing and speaking was investigated. This study conducted two types of experiment. The first one, the subject, in this case a singer, showed ranges of emotions such as extremely delighted, delighted, neutral, dejected, and extremely dejected. The head movements are associated through rotation while translating the emotions carried in the song. Later, in experiment 2, the vocalist was observed during the speech and similar emotional intention was found concurrent to head movements. It concludes that the head movements have firm correlation with emotions. Baroona (2019) shed lights on the use of nonverbal communication in teaching process. The study intended to find out the impacts of nonverbal communication in classroom settings. It was revealed that facial expressions such as smiles can calm students, hand movements can help students understand abstractions, head movements indicate responses, and bodily posture amplifies focus during the material explanations. In addition, dresses and clothing are also important parts in the teaching and learning process. Then, McClave (2002) researched on the patterns of head movements of native speakers of American English. She found that there are three distinct patterns of head movements, they are semantic functions, narrative functions, and interactive functions. In semantic function, head movements are patterned to move laterally, swiping right to the left or vice versa. This pattern indicates inclusivity, intensification, and uncertainty. Meanwhile for narrative functions and interactive functions, the head movement patterns appear to be more abstract and contextual. However, her study is focally oriented to American cultures alone.

From the previous research, it is found that Livingstone & Palmer’s (2015) results do not imply the results of emotion and head movements to the classroom setting, which makes research on classroom setting on head movement is urgency. Then, Baroona (2019) did conduct a study involving classroom setting, but very little was examined about the head movement only. The viewpoint of this study is nonverbal communication in general. Last, McClave’s (2002) investigation was meticulous but culturally restricted.

For further insights about the variations of head movement gestures in conversation, some literature reviews are provided in the following explanation.

**Non-verbal communication**

In a communicative interaction, we speak with words as well as we convey meanings more than words. Fujishin (2009) supports that in meaning exchanges, there are two types of communication; they are verbal and nonverbal. The former one is the capacity to convey the words and grammatical arrangement of a specifically cultured language into sentences. It depends on the language and incorporates productive skills such as speaking and writing as well as gesture language. Verbal communication is all correspondence that is spoken or composed in an explicit manner (Fujishin, 2009); for example, the newspaper that you read, the TV news that you hear, and the topics of discussions that you discuss or argue with your friends. Verbal correspondence incorporates all of spoken or composed that utilized in regular agenda to speak with others by employing the good manners of correspondence.

Individuals have consistently shared information and meaning with more than verbal language, we have used signals, signs, motions, words, colors, or some other methods for correspondence. On the other hand, nonverbal communication is all forms of communication that are not spoken nor written; for instance, your body type,
voice, looks, signals, development, dress, eye-contact, etc. It is your utilization of
distance, utilization of time, and the personal climate you make. This multitude of
things and innumerable others make up the nonverbal correspondence. It can be
stated that non verbal correspondence is all of what you look like, all the signals and
movements, and the distance that you make with others.

Nonverbal communication can be unavoidable, shifted, and significant to other
people. To be more acquainted with this quiet component of communication, there
are four essential classifications of nonverbal communication (Fujishin, 2009), they
are 1): the movements of body including how a person stands, head movements, and
eye contacts; 2). paralanguage, including voice and the tones it is spoken in. Paralanguage
is the way we talk. Beside the genuine words or content of our
messages, paralanguage incorporates pitch, volume, rate, and quality; 3). personal
presentation is more associated with the way a person dresses, appears, and contacts
with other people; and 4). proxemics, which is distance in regards of private distance,
individual distance, social distance, and public distance.

Nonverbal communication among instructor and students in classroom settings
can expand language correspondence and accordingly impact language learning. The
effective teacher mixes both usages of verbal and nonverbal ways to communicate
with their students. This has an immediate connection to the student’s
accomplishment. Leila (2015) supports that nonverbal communication has been
characterized as wordless communication. It incorporates evident practices like looks,
eyes, physical contacts, and manner of speaking, just as more subtle messages like
dress, actions, and spatial distance between at least two individuals. An instructor can
comprehend their students in the teaching process by noticing the students’ nonverbal
actions, too, such as their look when they understand the explanation or when they do
not understand the explanation.

The utilization of gestures decreases verbal responsibilities of both teacher and
students in a classroom circumstance. Teachers who utilize less signal in classroom,
gets less useful responses from their students. Besides, Bambaeero & Shokrpour
(2003) urges that effective communicators perceive the force of nonverbal messages.
In spite of the fact that it is indiscreet to connect explicit implications to signals or
activities, a few prompts shown through non-verbal communication are useful in
understanding the attitudes and the feelings speakers.

**Head Tilts and Movements**

In its natural setting, face-to-face interaction consists of both verbal and
nonverbal types of communication. Sometimes this communication device interacts
but it also counteracts at some other times. There are a lot that can be studied about
human interaction involving specific non-verbal communicative behavior, yet this
study only seeks the patterns occurred in concern to head movement regarding two
different contexts: argumentation and discussion. This communicative device is seen
important in both meticulous and casual conversations.

At a glance, the issue of head movement may not be seen as a significant
communication sign in a conversation because it is see as a device of style while
interacting with others. However, research has shown various patterns on head
movements during conversation across various topics of conversations. These
patterns are considered patterns because they can be predicted. Even the topic can be
predicted based on the head movement patterns observed (Maynard, 1987). Head
movement during conversation is not merely a stylistic device that takes place
randomly; it follows the contexts in where the interactions happen. Although head
movement can happen both in dialogue and monologue interactions, the ones mostly studied are those happen in two-way interaction as this is more context-interfered.

Below are head tilts and movements that are used as head tilt parameters in this study as suggested by Loomis (2011) and Cooperrider (2021).

**Table 1. Definition of Head Tilts and Head Movements**

| No | Label                              | Picture |
|----|------------------------------------|---------|
| 1  | Upward tilt (Loomis, 2011, p. 22). |         |
| 2  | Downward tilt (Loomis, 2011, p. 22). |         |
| 3  | Right tilt (Loomis, 2011, p. 22).  |         |
| 4  | Left tilt (Loomis, 2011, p. 22).   |         |
| 5  | Nod (Cooperrider, 2021).           |         |
| 6  | Shake (Cooperrider, 2021).         |         |
| 7  | Turn left/right (Loomis, 2011, p. 29). |        |
Consequently from the elaboration provided above, further research focusing on head movement patterns in classroom setting is crucial to explore. Based on the research gap mentioned earlier, the research question formulated for this current study is below: *What are the differences in head tilt patterns during student-student conversation when different topic is assigned?*

**RESEARCH METHOD**

This study adopts qualitative approach as it serves the objective to study the natural and social phenomena. Kumar (2011) adds that qualitative research makes use of qualitative data in nature and this type of research approach emphasizes on the situational interpretations and depictions accordingly to their natural settings. This approach matters the reasons behind something taking place instead of what is taking place. Hence, the researcher, seen as the meaning interpreter, is the core quality of this research design. In other word, different individual can see from different points of view, that is why the qualitative research is ingrained as subjective.

Concerning to the respondents, there were 2 respondents who were voluntarily involved in this study. Basically there were 6 respondents altogether. However, the other 4 were not engaged in the conversation. When given the topic of discussion, they finished the discussion in less than 2 minutes; and the topic of argumentation was finished in less than 1 minutes. Hence, the data from these 4 respondents were inadequate to be further explored about their head movements. Unlike these 4 respondents, their 2 other counterparts finished the discussion and argumentation topic for 14 minutes and 16 minutes, respectively. Thus the data were adequate. The respondents were the second year students at English Department of Serambi Mekkah University, Aceh, Indonesia. The data collection was done through videotaped observation. In the first round, the respondents were given a debate topic about “War video games should be banned”; while in the second round, they were a given a discussion topic about “How can we reduce global warming?” They were given 15 minutes for each topic. These two different topics are hypothesized to stimulate different head movements between the interlocutors.

There are various methods and techniques of collecting data in qualitative approach analysis as suggested by Ary et al. (2010) but an exquisite way in qualitative data collection is the human instrument. This is understood for the researcher to involve all of his/her senses in collecting as well as in interpreting the data. Indeed, the final data obtained from the human instrument can be subjective; hence, data triangulation is a re-assurement phase in a qualitative approach analysis (Noble and Heale, 2019). While the researcher needs to be reflexive and objective about the case point of view, another perspective is also necessary. In analyzing qualitative data, triangulation allows the validation strategy to get through (Santos, et al., 2020). Thus, the participants were personally interviewed using close-ended questions as shown below:
1. When you turn head upward/downward/leftward/rightward, what is your intention most likely to be?
2. When you nod/shake/turn/keep you head stationery, what is your intention most likely to be?

RESULTS
Initially, it is important to look back at the research question inquired in the previous section, which is: What are the differences in head tilt patterns during student-student conversation when different topic is assigned? Thus we can see the links between the question and the results displayed in the tables below. In addition, as there two different topics assigned—argumentation topic and discussion topic, the first result shown is head tilt patterns on argumentation topic.

| Code | Topic Label          | Upward | Downward | Leftward | Rightward | Nod | Turn | Shake | Stationary |
|------|----------------------|--------|----------|----------|-----------|-----|------|-------|------------|
| A    | Topic start          | 11     | -        | 2        | -         | -   | -    | -     | -          |
| B    | Topic pause          | -      | 2        | -        | -         | 1   | -    | -     | 9          |
| C    | Topic end            | 10     | 1        | -        | -         | -   | -    | -     | 1          |
| D    | Zoned-out topic      | -      | -        | 2        | 5         | 1   | 6    | -     | -          |
| E    | Information addition | -      | -        | -        | -         | 11  | -    | -     | 1          |
| G    | Information absence  | -      | 1        | -        | -         | -   | 7    | 4     | -          |
| H    | Recognition success  | 10     | -        | -        | -         | 2   | -    | -     | -          |
| J    | Affirmation          | -      | -        | -        | -         | 12  | -    | -     | -          |
| L    | Denial               | -      | -        | -        | -         | 2   | -    | 10    | -          |
| Total|                      | 20     | 15       | 2        | 7         | 16  | 26   | 14    | 11         |

The data were counted from both interlocutors without differentiating one as the speaker and the other as the listener. This technique was done because in both topics, the interlocutors were actively engaged in the conversation without showing any criteria of either a speaker or a listener. Hence, from the table above it can be seen that the majority of head movement pattern used in argumentative topic is head turning (both right and left), performed for 26 times by the participants in the overall topic labels. The movement is either by looking away to the left or to the right. This head-movement patterns was mostly performed when the speaker added information to support his/her current position; when the interlocutor missed a certain and specific information about the topic they were arguing; when the interlocutor zoned out of the topic being argued; and when there was a denial.

The second most performed head-movement is upward movement that took place for 20 times. This type of movement was performed by the speakers when the topic ended and when their interlocutor recognized their point(s). Later, nodding was performed 16 times; mostly when there was an affirmation, recognition success, topic paused, and topic zoned-out. Specifically, when the nodding happened to give affirmation, another facial expression such as wrinkled eye-brows followed. The state of affirming was more intense in the argumentation topic compared to the discussion topic.
The next head movement used during the argumentation topic was looking downward, mostly when the topic started, the topic paused, and the topic end. Looking down also means that the speakers tried to formulate or generate ideas before speaking. The majority of downward movement happened when the topic started, which happened for 11 times. Next, it is shake movement which mostly happened when there was a denial (10 times). People naturally shake when they disagree with an idea. Besides, the speakers also shook when there was information absence during the argumentation. Most likely, this information absence leads to an assumption that the interlocutor was having the incorrect information, instead of missing it. Then, no head-movement occurred as the topic paused, topic ended, and information addition from the interlocutor. Additionally, tilting the head rightward happened when the speakers found their interlocutor zoned out of the topic and when the topic started indicating the readiness to argue. Finally, tilting head leftward happened occurred the least in argumentation topic as it took place only twice which was when the topic zoned-out. This was followed by the shrugging the shoulders backward and wrinkling the eyebrows indicating disagreement.

Later, the occurrences of head movement in discussion topic can be seen in the table below.

| Code | Topic Label          | Head movements |
|------|----------------------|----------------|
|      |                      | Upward Downward Leftward Rightward Nod Shake Turn Stationary |
| A    | Topic start          | 9 3 - - - - - - - |
| B    | Topic pause          | - - - 4 - - - - - |
| C    | Topic end            | 13 6 - - - - - - |
| D    | Zoned-out topic      | - - 9 - - 18 3 - |
| E    | Information addition | - - - 17 2 - - - |
| F    | Information absence  | - - 1 12 - - 2 - |
| G    | Recognition success  | 12 - - - 21 - - - |
| H    | Affirmation          | 8 - - - 14 - - - |
| I    | Denial               | - - 2 - - 15 5 - |
| J    | Total                | 42 3 12 33 43 15 25 3 |

In the table above, it can be seen that the majority of head tilt and movement pattern occurred was nodding (43 times). It mostly happened when there was recognition success (21 times), affirmation (14 times), topic ends (2 times), and information addition (2 times). This shows that discussion topic involves more moments where both interlocutors agreed on something so that nodding was the most frequent movement. Secondly, upward tilt also happened frequently, which was 42 times. Upward tilt occurred when the topic started, topic ended, recognition success, and affirmation. Upward tilt is seen as human behavior indicating satiation. In this case, the satiation made upon topic start, topic end, recognition success, and affirmation.

Later, rightward tilts also happened quite often (33 times). This tilt mostly occurred when there was an information addition, information absence, and topic pause. Then, turning happened for 25 times. This happened generally when the interlocutors found that the topic zoned out, information absence, and denials.
Turning left is more often with the respondents involved in this study. Then, leftward tilt occurred for 12 times, which was when there was a topic zoned-out, information absence, and denials. It is most likely that looking to the left (or turning left) indicates an idea of disagreeing or disliking the proposition(s) being discussed in the momentum. Last, the least head tilt and movement patterns were downward tilt and stationary, both occurred or 3 times only. Downward tilt took place when the interlocutor wanted to start a topic; this indicated the speaker’s readiness to start speaking about the issue and to express her opinion. Meanwhile, stationary pattern occurred when there was a topic soned out. Although this happened, it is seen as a minority head movement pattern in these current conversations.

Additionally, data from interview show the following details. From the first question asking about the respondents’ intention when they looked upward, they said that they were interested or they felt challenged with the idea of their interlocutor. Then, looking downward means that they already got the point but kept on paying attention until their interlocutor finished. This statement is as shown below:

**Respondent 2:** “When I looked down, I think I already know his point but I must be polite. So I listened till the end”.

Later, from the second interview question, the respondents informed that when they nod in a gradual way, it means that they carefully listening and have profound agreement on their interlocutor’s statement. However, when they nodded quickly, it means they have definitely understood and ready to reply, as annotated in the excerpt below:

**Respondent 1:** “I already know what she saying. I want to reply. So I nod like this (performed nodding quickly). It means you can stop. I already understand you”.

Last, when they shook their heads, it was clear that they disagreed. Meanwhile, they felt disinterestedness when they kept their head stationary. This position is usually followed by the movement of gradual pulling backs.

**DISCUSSION**

The results show that from two different topics—discussion and argumentation, variations in head movements are seen. From the eight types of head movement variation being investigated in this study, there are differences of deployment when different topic is engaged. Compared to discussion topic, head movements occurred more in argumentation topic. It happened for 111 times in discussion topic and 176 times in argumentation topic. This shows that, naturally, people are drawn more into the topic that absorbed their attention. In this case, argumentation topic absorbed more the interlocutors’ attention compared to discussion topic. This what makes more head movement took place.

More specifically, to compare this two different topics, the data are as below. First, the upward tilts occurred 20 times in discussion and 42 times in argumentation. Then, it is followed by downward tilts taking place or 15 times in discussion and 3 times in argumentation. The occurrence is vice versa as there are more occurrences in argumentation topic. Similarly, this kind of occurrence also took place in turn movement, which happened for 26 times in discussion and only 15 times in argumentation. The rest of the movements occurred more in discussion topic than in argumentation topic. Rightward movements occurred 7 times in discussion and 33 times in argumentation. Later, nodding occurred 16 times in discussion and 43 times in argumentation. The same occurrence also took place for shaking movement which
happened 14 times in discussion and 25 times in argumentation. Hadley and Ward (2021) also inserted that at the point when individuals cooperate and converse, they are involved in synchronization. This synchrony has been shown in a scope of settings, from strolling or playing music together to holding a discussion, and has been connected to prosocial results like improvement of affinity and proficiency of collaboration. While the premise of synchrony stays indistinct, a few investigations have tracked down synchrony to increment when a communication is made testing, conceivably giving a method for working with cooperation. In addition, there are other factors affecting the head movement pattern, which is the intimacy between the interlocutors.

Furthermore, the way individuals variables collaborate in various conversational capacities and their hypothetical ramifications is also determined by additional factors. Kinematic properties of head movements, like sufficiency, recurrence and cyclicity, separated different conversational topics and capacities. That is, they were work of explicitness: balanced, cyclic developments were utilized to indicate 'yes', 'no' or counterparts; straight, wide-angled movements expected claims for talking; tight direct movements happened in stage with focused syllables in the other's discourse in coordinated developments; and wide, straight developments happened during stops in the other's discourse. It bears upon the connection between the motioning of informative aims and the synchronization of interactional mood. Consequently, the previous seems to decide the circumstance and rhythm of reactions, for example, 'yes' and negative', 'while the last option decides the guideline of 'synchrony' developments (McClave, 2000).

CONCLUSION
From the result, it can be concluded that head movement patterns solely depend on the types of topics being discussed. As shown in the data, during conversation with the argumentation topic, head movement patterns that generally took place was turning—both right and left. Meanwhile, when the topic is about discussion, different head movement patterns occurred, which were nodding and looking up-ward. However, this study is not without limitation. The scope of this study may be too broad to be peered thoroughly. Thus, this study only focus on the head movement as it is seen as the most perceivable parts in human interactions. Thus it is suggested for the future researchers who are interested in investigating the similar research area to dig deeper into other parts of body that are robust within the nature of non-verbal communication sources. In addition, other variables such as speed, noise, and synchronicity can still be further researched in the future.

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