ANALYSING PEDAGOGIC DISCOURSE THROUGH THE

TEACHERS' USE OF SPACE IN EFL CLASSROOMS

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Abstract

In the classrooms, the use of space has the same potential as language in shaping the pedagogical process. This study analyzes different types of classroom space and how they are used by two teachers to make different meanings. The analysis was carried out by focusing on the positioning of the teachers during lesson stages, namely Openings, Sequencing, and Closings based on the semantic categories of classroom space developed by Lim et al. (2012). The results explicated the use of four different types of space, namely authoritative space, personal space, supervisory space, and interactional space to create a learning experience and how they are redefined by the teachers for specific reasons. The findings of this study are expected to provide insight as to how classroom space as one of the semiotic resources is crucial to the pedagogical process and therefore offers a way for teachers to evaluate and transform how they approach their teaching.

Keywords: classroom space, classroom discourse, pedagogy

Introduction

The idea of multimodality has gained significant importance in language education research (Canagarajah, 2018; Kress, 2010) and it has changed the way research on the pedagogical process in the classroom is conducted (Lim et al.,2012). Understanding the pedagogical process is no longer limited to the traditional view that it is solely based on how language is used in the classroom. The use of other modes such as space, gesture, and gaze also play a role in how the classroom experience is constructed for the students since in point of fact, classroom communication engages various semiotic resources (Taylor, 2014). Involving only language in classroom research is therefore considered inadequate, as Unsworth (2006) argues that there is a growing consensus that literacy and its teaching methods cannot be limited solely to the domain of language anymore, thus requiring epistemology and research methodology which considers the orchestration of multimodal semiotic resources (Jewitt, 2012).

As one of the most frequently used semiotic resources in the classroom, teachers' use of space plays a crucial role in the process of meaning-making in the classroom. McGregor (2004) argues that space in the classroom embodies "a hidden form of the curriculum". Different positioning in the classroom made by a teacher, furthermore, can realize "semiotic distance" (Matthiessen, 2010), which is negotiated and rearranged through the teacher's fixed position movement and pacing (Lim, 2011). With regard to multimodality, the classroom space is significant since it becomes the material site in which various semiotic resources are instantiated and embodied (Lim, 2011). Therefore, a more comprehensive analysis of the classroom space is needed to gain deeper insights into the pedagogical discourse and how it is shaped by the physical environment.

Each movement or space the teacher uses has a specific meaning and implies a certain essence. Givens (2002) suggests that people do not move in proxemic spaces without any reason; there must be some particular motives. Moreover, Matthiessen (2010) adds because of the spacial position of teachers and the semiotic distance realized by them, teacher-student social interpersonal relations can be established. With regard to semiotic distance, Hall (1966) suggests four broad classifications of space based on the typical distance between participants and the degree of physical contact experienced during communication. These categories are (a) public space, (b) social-consultative space, (c) casual-personal space, and (d) intimate space.

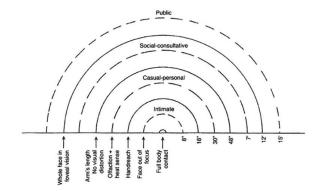


Figure 1. Hall's (1966) distance sets (taken from Lim, et al., 2012, p. 237)

Referring to Hall's taxonomy, Lim, O'Halloran, & Podlasov (2012) claim that in the classroom context, most communication takes place in the social-consultative space, which creates a formal relationship between teacher and students. For this reason, they developed sub-divisions within the social-consultative space in order to further examine its semiotic potential. The sub-divisions proposed by Lim et al., (2012) include (1) authoritative space, (2) personal space, (3) supervisory space, and (4) interactional space.

The first type of space, the authoritative space, is at the social-consultative space's outer limit as in terms of proximity, this space is furthest from the students. The area in front of the teacher's desk and at the central forefront of the classroom can be described as the authoritative space. These spaces are where the teachers position themselves to conduct formal teaching and to provide instruction to facilitate the lesson. Furthermore, Lim et al. (2012) state that the physical distance in the authoritative space creates a formal atmosphere in the relationship between teachers and students. The second type of space is the personal space which is situated behind the teacher's desk. It is primarily utilized for preparing and organizing teaching materials but can also function as an authoritative space when teachers teach from behind their desks. The third type of space is the supervisory space. It is typically located beside the students' rows and along the sides of the classroom, where teachers exert implicit control and power through "invisible" monitoring during students' activities, particularly during group or individual work. In contrast, the fourth type of space, the interactional space, is positioned between the social-consultative and causalpersonal spaces (see Figure 2.1), where closer proximity between teachers and students fosters interaction and reduces interpersonal distance. Teachers generally occupy this space by standing among or between the rows of students' desks to provide personal consultation and guidance, unlike in the supervisory space where teachers primarily supervise students.

The above classification of space is advantageous for those who want to further examine the semiotic potential of space. Nevertheless, Lim et al. (2012) add that the classroom space theorized in their study is typical of a traditional classroom, where the teacher's performance space is situated at the front of the class and the students are seated

in rows facing that space. Therefore, adjustment in terms of physical locations of the space will be needed if the investigation involves different seating arrangements such as herringbone, U shape, and horseshoe.

The discussion on the teacher's use of space in the classroom has been brought to fore by several researchers, Gana et al. (2015) analyzed the use of space by teachers in two mathematics classes in a secondary-level setting to explore the relationships and meanings associated with it. The findings demonstrate that the semantic spatial configurations hold significant meaning and influence social interactions in the specific teaching and learning environment. The authors argue that spatial configurations are material forces that reflect teachers' pedagogical beliefs and contribute to the constitution of social experience in the classroom. Komarawan (2019) conducted a study similar to Gana et al.'s research in a primary school setting. The study focused on a science classroom and examined different semiotic resources used in the classroom which includes space to investigate power relations through multimodal analysis. The findings of the study suggest that in addition to language and gaze, the use of space is also important in creating dynamic pedagogy that includes the maintenance of authority, building rapport, and creating a sense of solidarity through the use of semiotic resources.

In a tertiary-level setting, Irgin (2017) conducted a study in Turkiye to explore the fundamental components of proxemics and kinesics (paralinguistics) and their utilization. The findings suggest that proxemics (and kinesics) provide a framework for listeners to comprehend the message conveyed by speakers, and thus, it is crucial to teach these as paralinguistic skills to enhance communication.

Drawing from previous research, it is evident that the use of space in the classroom has a significant impact on teaching and learning. To contribute to this discussion and further explore the potential of classroom space in the meaning-making process, this study takes a multimodal approach to investigate the use of language and space by teachers in two EFL classrooms in secondary schools in Indonesia. By involving two teachers in different

classrooms with distinct settings, this study aims to extend Lim et al.'s (2012) work on spatial semiotics and its role in pedagogic discourse.

Method

To investigate the use of classroom space, an analysis was carried out by focusing on the positioning of the two teachers during teaching based on the semantic categories of classroom space (Lim et al. 2012). In particular, the analysis was focused on the use of classroom space in different lesson stages proposed by Richards & Bohlke (2011), namely Openings (the phase which serves to focus the students' attention on the aims of lesson), Sequencing (the main phase), and Closings.

To collect the data, the study involved two data collection techniques, namely observations and stimulated recall interviews. The observation itself employed two activities, including videotaping and writing field notes. The observation was done once in each teacher's lesson which lasted for two lesson hours. Video recording was employed in order to capture a comprehensive view of classroom dynamics during the teaching and learning process. The reason for using video recording is that it has a unique ability to capture the diverse forms of communication that take place in the classroom (Flewitt, 2006), providing researchers with a powerful tool to investigate classroom phenomena (Hackling, Murcia, Ibrahim-Didi, & Hill, 2013). The data gathered from the video recordings were analyzed using a framework developed by Bezemer & Jewitt (2010) which involves various stages such as collecting, logging, viewing, sampling, transcribing, and analyzing data. In addition to video recordings, field notes were also utilized to support the primary data and to document any noteworthy incidents related to the research topic during the lesson.

The researcher also employed stimulated recall interviews as a data collection method, where teachers were interviewed while watching recordings of their classroom teaching. This approach provides valuable insights into why individuals behave in certain ways in different situations (Dempsey, 2010). The stimulated recall interview is especially useful in clarifying issues related to a teacher's actions or decisions that may be unclear to

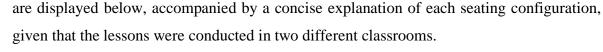
the researcher. In this study, the interviews were used to gather additional information about the observations, specifically regarding the reasons why the teachers used particular spaces during the lesson.

This study involved two English as a Foreign Language (EFL) teachers working at a junior high school. In order to protect their identities, the teachers were given pseudonyms - Ana and Fitri - which are used to refer to them throughout the study. Both teachers agreed to participate in the study. Ana is an experienced English teacher with 13 years of teaching experience in a well-known public school located in Demak. The classrooms in her school are equipped with a sound system that allows the use of a microphone during teaching, and an LCD projector is also available in each classroom. Fitri, the second participant, has been teaching English in a private school in Demak for over 13 years. Her school, located outside the city, has average technological support for learning. The study was conducted when both teachers were teaching the same basic competence. The selection of these two teachers was based on the assumption that the differences in technological support and seating arrangements could provide valuable information on how language and space are used in the classrooms.

To capture the classroom phenomena comprehensively without being involved in the activities being observed, the researcher acted as a nonparticipant observer in the present study. The nonparticipant observer itself according to Cresswell (2012) is someone who observes a specific location without taking part in any actions of the participants but observes and takes note of their actions. In this study, the researcher played the role of a nonparticipant observer and placed himself at the back of the classroom to observe and record the phenomenon under investigation.

Results and Discussions

To offer a comprehensive depiction of how Fitri and Ana utilized specific spaces in their respective classrooms, graphical representations of proxemic space in their classrooms



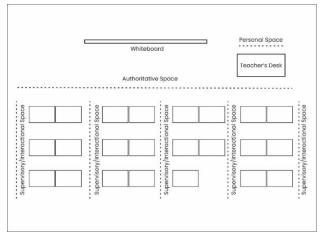


Figure 1 Illustration of proxemic space in Fitri's classroom

In Fitri's classroom, the students' seats were arranged in a way that positioned the students facing the whiteboard while the teacher was placed in the front space of the class. In this setting, the front space of the classroom is considered the authoritative space. Besides, the personal space is located around the teacher's desk and chair, whereas the supervisory and interactional space is spread in the students' seats and desks.

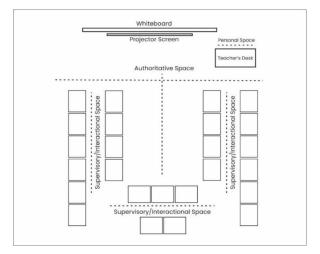


Figure 2 Illustration of proxemic space in Ana's classroom

Unlike Fitri who used a classroom-type seating arrangement, Ana used U-shaped which made it possible for her to have a broader authoritative space; the authoritative space is not only located in the front space of the classroom but also in the center space of the classroom. In this kind of setting, the authoritative space has a larger area compared to Fitri's setting. Moreover, the personal space is located around the teacher's seat and desk, whereas the supervisory and interactional space is spread in the students' seats and desks as well.

Spaces in the Lesson Stages

Based on the analysis of the data, three types of space were inhabited by both teachers during the teaching process, namely authoritative space, personal space, and supervisory space. While interactional space existed by Fitri in her lesson, this space was absent in Ana's. The following table shows the occurrence of space used by both teachers in three lesson phases namely pre-teaching, whilst-teaching, and post-teaching.

Teacher	Lesson Phases	Spaces			
		Personal	Authoritative	Supervisory	Interactional
Fitri	Openings	00:05	07:10	00:00	00:00
	Sequencing	00:01	35:06	14:43	10:19
	Closings	00:00	02:29	00:00	00:00
Total Duration		00:06	44:45	14:43	10:19
Ana	Openings	00:00	01:03	00:00	00:00
	Sequencing	43:52	10:07	06:13	00:00
	Closings	00:00	01:10	00:00	00:00
Total Duration		43:52	12:20	06:13	00:00

Personal Space

Personal Space is the space which is located behind the teacher's desk. This is the place where the teacher organizes materials and prepares for the next part of the lesson.

Fitri only spent 6 seconds (5 seconds in the Openings and 1 second in the Sequencing) positioning herself in this space. This happened because instead of inhabiting her personal space to organize her teaching material and prepare the lesson, she chose to inhabit the authoritative space, the place where she put most of her documents including her laptop. Unlike Fitri who spent less time in the personal space, Ana spent 43 minutes and 52 seconds in this space. While it is said that personal space is the space where a teacher prepares the lesson, the use of personal space by Ana does not necessarily mean that she spent most of her time preparing the material for the lesson. Instead, she also inhabited the personal space to deliver the materials. The reason for Ana's decision to choose to inhabit the students. In fact, Ana spent 10 minutes occupying the personal space when she explained the materials which were done mostly in the Sequencing phase. The figure is clearly superior compared to Fitri's case which only spent 1 second in the personal space during the Sequencing phase.



Figure 3 The teachers were inhabiting the personal space

Authoritative Space

The next type of space is the authoritative space. This space is located in front of the teacher's desk and in the front center of the classroom. It is the space where the teacher positions himself to conduct formal teaching and to deliver instruction to facilitate the

lesson (Lim, 2011). In particular, Fitri spent 44 minutes 45 seconds, or 64 % of the whole lesson time inhabiting this space. This type of space was occupied by Fitri mostly in the Sequencing stage where plenty of activities require the teacher to position herself in the front space of the classroom such as Establishing Reason for Listening, Checking and Summarizing, and Deconstructing the Listening Text. In the Establishing Reason for Listening, for instance, Fitri positioned herself in the front space of the classroom when she explained several things the students should take into account before listening to the song, such as what information they need to find out during the listening process and what they should do in the Checking and Summarizing activity. Similarly to this, Fitri also occupied the authoritative space when she facilitated the students in Deconstructing the Listening Text activity, i.e. when she elicited the students' opinions toward the message of the song. By occupying the front space of the classroom, Fitri has established a sense of authority, putting herself as the controller of the class. Moreover, by doing so, she also made the whole students able to easily pay attention to her since they only needed to direct their gaze forward.

The time spent in the authoritative space by Ana in her lesson was 12 minutes and 20 seconds. While Fitri spent 64% of her time occupying this space, only approximately 20% of the whole lesson time was spent by Ana in the authoritative space. However, similar to Fitri, the Sequencing phase is found to be the phase where Ana spent most of her authoritative space-time compared to other lesson phases. For instance, Ana positioned herself in the front space of the classroom when she facilitated the students in creating a letter in the Reconstructing the Listening Text activity. When giving an example of how a letter is written and what content should be present in a letter, Ana stood up in the space where the whole students could see her and the letter she brought. While the teacher may use other types of space when communicating an idea, showing concrete things to the students is achievable through the use of authoritative space. In this case, Ana chose to occupy this space since it enables her to deliver her idea and show a letter as an example concurrently.



Figure 4 The teachers were inhabiting the authoritative space

Supervisory Space

The next type of space used by both teachers is the supervisory space which is located alongside students' desks, or between the rows of students' desks (Lim, 2011). Based on the data, Fitri spent 14 minutes 43 seconds (21% of her total time) inhabiting this space. The use of the supervisory space was done by her only in the Sequencing phase, especially in the activities when the students were doing the task. In particular, when the students were doing the task, Fitri visited the supervisory space, covering the area between the rows of the student's desks. Similar to Fitri's case, Ana also spent her time in the supervisory space only during the Sequencing phase. In particular, she spent 6 minutes 13 seconds observing her students working on a task by roaming around the area alongside the students' desks as well as the area between the students' desks. To know the reason behind this phenomenon, Ana was interviewed.

"I inhabited the supervisory space so as to check whether they find any difficulty when doing the task. (Furthermore) it will create the sense of being supervised for the students, so that they will do the task." - Interview note

Based on the result of the interview, it can be concluded that the use of supervisory space was aimed to give the students a sense of being patrolled or supervised. It is in line with Lim's opinion, that supervisory space is the place where the teacher monitors the students' activities and makes his or her presence known through a 'patrol' around the fringes of the classroom (Lim, 2011).



Figure 5 The teachers were inhabiting the supervisory space

Interactional Space

The interactional space is realized when the teacher stands beside the student's desk or between the desks' rows, usually occurring during activities where students are working on individual or group work (Lim, 2011). Based on the data, Fitri spent 10 minutes and 19 seconds occupying the interactional space. This space was specifically inhibited by Fitri in the Sequencing phase which is the stage where she set a group task. Fitri positioned herself in the interactional space where she could make interaction with the students in form of giving personal advice. Here, the closer proximity between the teacher and the student(s) facilitates interaction and reduces interpersonal distance (Lim et al., 2012).



Fitri advised a group of students

Figure 6 Teacher's positioning in the Interactional Space

While most of the space in both Ana's and Fitri's lessons corresponded to the function they have during the teaching process, the function of a particular space may be changed. For instance, an authoritative space is where the teacher sets himself in order to perform formal teaching and deliver instruction to facilitate the lesson (Lim, 2011). However, based on the data, it is found that Fitri frequently inhabited the authoritative space to prepare the things needed to deliver the materials. Since Fitri put her laptop on a student's desk located on the front side, she frequently inhabited this space. In this case, Fitri transformed the authoritative space into a personal space.



Fitri prepared the material in the Authoritative Space **Figure 7** Teacher's positioning in the authoritative space

The transformation of the authoritative space into the personal space was not only done once. Based on the analysis, there were 9 occurrences showing the teacher's use of the authoritative space as the place to prepare the lesson materials. It accounts for the high portion of time spent in the authoritative space. The main reason for this occurrence is the position of the LCD projector which was located on the student's desk, demanding Fitri to frequently visit the space to access the laptop since the VGA cable was not quite long to connect the laptop to the LCD projector put in the student's desk.



Figure 8 Ana's positioning in the personal space

In Ana's case, the transformation was done in reverse. Based on the data, Ana only spent 12 minutes and 20 seconds in the authoritative space whereas 43 minutes and 52 seconds were spent by her in the personal space. The reason for this is that the classroom is equipped with a microphone which can be used by the teacher when she wants to say something. To find out the further reason behind the phenomenon, the following interview proceeded. Ana said:

"In our school, most classrooms are equipped with a sound system with a microphone. However, the cord is not quite long. It can only be used around the teacher's desk." - Interview note

Based on the interview, the short microphone cord hindered Ana from moving to other spaces than the personal space and some areas in the authoritative space. Therefore, to cope with that barrier, she tended to position herself in the personal space when delivering the material or giving instructions. In this case, there is a shift of function of the space; although the teacher physically inhabits the personal space, functionally, the space is considered the authoritative space.

Spatiality and Classroom Pedagogy

With regard to spatial semiotics, physical spaces in the classroom may not always only serve a single function. This is in line with Lim's (2011) research that spaces are always redefined by the nature of the lesson activities. The space behind the teacher's desk can be defined as the personal space while the authoritative space is located in the front space of the classroom. Nevertheless, in both teachers' cases, both spaces are redefined; the personal space changes its function as authoritative space when the teacher delivers the materials from the teacher's desk, whereas authoritative space becomes personal space when the teacher prepares her lesson in that space. This is in line with Taylor (2009) and Brooks (2011) which suggest that the physical classroom space has an important role in shifting teaching practice and consequently, can affect, student learning. What makes interesting from the findings is that this redefinition of spaces is also stimulated by the availability of teaching aid; the microphone available in Ana's classroom has hindered her in exploring the classroom space, while Fitri could freely occupy different kinds of classroom spaces during her lesson. While it is simplistic to assume that technology supports learning, the finding reveals that technology does not necessarily enable teachers to enhance the use of semiotic resources -i.e. the use of space -in their teaching. In this case, the teachers need to understand the use of technology in learning and its limitation which can negatively impact learning (Lippman, 2010).

Conclusion

The study uncovers how teachers utilize classroom space and how this contributes to the creation of meaning during different stages of a lesson. By investigating the teacher's positioning and how it affects the goal and relationship the teachers want to make, this study brings to fore the idea that the use of space as one of the semiotic resources is crucial to the pedagogical process. Furthermore, based on the findings, this study argues that classroom spaces in the classroom may not always only serve a single function. Although teaching the same material, the use of space done by both teachers was instantiated differently thus creating different learning experiences. This also resulted in different representations of notions such as power, authority, and participation (Gana et al. 2015).

Due to the constraints of time and space, the study's scope is restricted, thus affecting the depth and breadth of the research findings. The data were only taken and examined from a lesson of two teachers who were involved in this study. These constraints therefore limit the generalisability. Notwithstanding, this study provides an overview of how teachers teach from a multimodality point of view, where the use of language is not the only important, deciding aspect of the success of students' learning. This research offers a way for teachers to evaluate their teaching process, opening teachers to opportunities and transforming how they approach their teaching.

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