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Investigating Sociocognitive Functions of Mother Tongue in a Postgraduate EFL Classroom in Pakistan

Abstract   Recent studies, however, have shown that MT serves a symbolic tool and can be way more effective in L2 learning than the exclusive use of TL. While many studies have examined the extent and functions of MT, only a few have explored the sociocognitive functions using Vygotsky's sociocultural (SCT) framework. The present study, therefore, adopted SCT to examine the amount and sociocognitive functions of MT. Classroom observations and stimulated recalls interviews were used to collect data from MBA students (n=6). Results showed that, learners MT use made up only 14% of the total amount of speech in L2 classroom. Most importantly, MT performed important functions, such as scaffolding, intersubjectivity and cognitive regulation. MT facilitated vocabulary learning in L2 through scaffolded help; created intersubjectivity by increasing motivation, reducing anxiety, and helped internalize L2 through cognitive self-regulation. A number of implications for classroom pedagogy and language policy have also been discussed.

Key Words: Mother Tongue, Second Language Learning, Sociocultural Theory, Medium of Instruction, Higher Education, Language Policy

Introduction

L2 pedagogy has been predominantly influenced by monolingual approaches favoring an exclusive use of target language (TL). The assumption underlying monolingual approaches is that language learning happens when learners make exclusive use of TL for meaning making (Cummins, 2013; Hall & Cook, 2012). Thus, MT use has been regarded as unfavorable to language learning because it interferes with TL acquisition. Recently, however, this monolingual orthodoxy has been challenged by studies using sociocultural approaches conceptualizing languages, both MT and TL, as symbolic tools that mediate inter-psychological and intra-psychological processes. Butzkamm (2003), for instance, argued that MT use is 'twice as efficient (i.e., students reach the same level of second language proficiency in half the time), without any loss in effectiveness, as instruction that ignores the students' native language' (p. 38). There is ample evidence that suggests that MT plays an important and facilitating role and can be used as a resource in TL pedagogy (Anton & DiCamila, 1999; Butzkamm, 2003; Chen & Rubinstein-Avila, 2015; Hall & Cook, 2012; Levine, 2011; Macaro, 2001; 2005). While much of previous research has focused on the amount of teachers' and functions of MT, such as vocabulary translation, memory retrieval, text comprehension, maintaining interest in the activity, maintaining conversation, making the tasks manageable, and establishing relations with interlocutors in EFL classroom (Atkinson, 1987; Auerbach, 1993; Butzkamm, 1998; 2003; Levine, 2011; Macaro, 2001; 2005; Pan & Pan, 2010), studies exploring the functions of MT in content-based instruction (CBI) where English is the medium of Instruction (EMOI, henceforth) are conspicuously absent. Besides, only few studies have explored the functions of L1 from a Vygotskian sociocultural (SCT) perspective, particularly, in contexts such as Pakistan where English is learned and taught as a foreign language (Lantolf & Thorne, 2006; Wertsch, 1985; 1991; 1998). SCT offers a comprehensive framework for understanding the mediational role of MT in English as foreign language (EFL henceforth) learning and offers insights into the inter- and intra-psychological processes in sociocultural settings (Anton & DiCamilla, 1999; Lantolf & Thorne, 2006; Levine, 2011).

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Pakistan offers an interesting site for such study because of its multilingual landscape with more than seventy indigenous languages, and EMOI from rade 11 and onward. All the textbooks of these grades are in English and examinations are conducted in English medium in (NEP, 2017). It is mandatory for teachers to make exclusive use of English for instruction and interaction inside the classroom (British Council, 2015). However, evidence from classroom settings suggests that both teachers and students make use of MT for various pedagogical and non-pedagogical purposes (Manan, David, & Dumanig, 2016; Channa et al., 2017; Tamim, 2020; Umar, 2017). That said, while there are studies available on MT use at secondary and higher secondary schools (Norton & Kamal, 2003; Umar, 2017), it is worrisome that there is a dearth of studies examining the amount and functions of MT in higher education context in Pakistan. The need, therefore, is to examine as to what extent and why the teachers and learners use MT inside university classrooms. Thus, the current study adopts SCT framework to examine the amount and sociocognitive functions of postgraduate business students' MT in a university classroom in Pakistan. Most specifically, this study aims to answer the following questions:

1. What is the frequency of postgraduate business students' MT in an EMOI classroom?
2. How does postgraduate business students' MT perform sociocognitive functions in an EMOI classroom?

In what follows, we will discuss the SCT followed by a review of literature on the functions of MT in EFL classrooms. Next, we delineate the methodology we adopted to answer the research questions followed by a detailed illustration of findings. The article concludes with discussion and implications.

Sociocultural Theory (SCT) and Sociocognitive Functions of MT in L2 Classroom

Research in SLA has been characterized by an epistemological divide between cognitivist and sociolinguistic approaches. Cognitivist approaches focus on mental processes in isolation from the social and cultural context, or condescendingly relegate the context to play the second fiddle. Sociolinguistic approaches, on the other hand, accord primacy to social context and regard mental processes as the epiphenomenon of the environmental factors (Firth & Wagner, 1997; Kramsch, 2009; Zuengler & Miller, 2006). SCT, however, conceives of human development as a dialectical unity between the biological endowments, psychological processes and sociocultural context involved in language learning (Wertsch, 1991). According to SCT, mediation plays the central role in the development of higher order mental functions, such as categorisation, rationality, and logic, at two interdependent levels, namely inter-psychological, that is, meaningful interaction with other people, and intra-psychological levels, that is, one's ability to regulate one's own thoughts (Lantolf & Thorne, 2006).

These mental functions are mediated through three cultural factors, including activities, artifacts and concepts. Artifacts that mediate human activity include both 'material and conceptual aspects of human goal-directed activity that are not only incorporated in [an] activity, but are constitutive of it' (Lantolf & Thorne, 2006, p. 62). For example, SCT conceives of language as a symbolic artefact that mediates both our social interaction and cognitive regulation. Simply put, language serves to not only regulate our external activities, such as inter-personal communication, but also intra-personal communication, such as thinking and remembering. Thus, language is both incorporated in our communication and also constitutive of it. In the context of language learning, this symbolic mediation through language takes place within the zone of proximal development (ZPD) which refers to the difference between a learner's ability to make use TL independently, and their potential to use the TL with the help of a more knowledgeable other (MKO), such as a teacher or a peer.

The concept of ZPD involves two most important concepts, scaffolding and inter-subjectivity. Scaffolding refers to the help offered by an expert or peer to a novice learner. Scaffolding involves verbal, for instance MT, and non-verbal/paralinguistic, such as gestures, facial expressions, and eye contact. According to Anton and DiCamilla (1999), scaffolding involves 'recruitment, reduction, direction maintenance, marking critical features and frustration control and demonstration' (p. 235). In a classroom context, it means inspiring learners' interest in a certain activity; making the task easy to follow; maintaining their motivation to pursue the goal; creating awareness amongst learners about their comprehension and production of L2; and alleviating anxiety and demonstrating the way to arrive

at a solution. Inter-subjectivity refers to interlocutors' shared perspective on their situation definition, that is, 'the way in which objects and events are represented or defined' (Wertsch, 1985, p. 159). Kramsch (2009) extends the concept to include 'shared memories, connotations, projections, inferences elicited by the various sign systems we use in concert with others' (p. 19). It is important to note that inter-subjectivity is not achieved merely on account of a shared background, that is social, political, cultural and linguistic, but through the way communication between interlocutors on a certain topic in a given situation evolves through compromises to arrive at a consensus to perform an activity (Wertsch, 1985). Inter-subjectivity is made possible by the semiotically mediated negotiation involving agreements, disagreements, restatements and clarifications (Wertsch, 1998). The sociocultural theory provides us with the lens to review previous studies with respect to the functions of MT use in L2 classroom.

Functions of MT in EFL Classroom

An increasing number of empirical studies into second/foreign language (SL/FL) education supports a judicious use of MT in SL/FL classrooms (Butzkamm, 2003; Chen & Rubinstein-Avila, 2015; Hall & Cook, 2012). Butzkamm (2003), for instance, argues that MT use is 'twice as efficient (i.e. students reach the same level of second language proficiency in half the time), without any loss in effectiveness, as instruction that ignores the students' native language' (p. 38). Research has shown that MT is a linguistic resource, a pedagogical tool that mediates SL/FL learning by performing a number of psycholinguistic, such as vocabulary translation, memory retrieval, text comprehension, maintaining interest in the activity, and some of the sociolinguistic functions, such as maintaining conversation, making the tasks manageable, and establishing relations with interlocutors in classroom (Atkinson, 1987; Butzkamm, 1998; 2003; Levine, 2011; Macaro, 2001; 2005).

For instance, research has shown that MT helps learners to understand instructions and explain content; facilitates comprehension and production of SL/FL; and, promotes collaborative talk (Guerrero, 2018; Ma, 2016). For instance, Varshney and Rolin-Lanziti's (2006) study investigating the functions of MT of the first year students learning L2 (i.e. Spanish, French, German and Japanese) in an Australian university showed that MT use helps to explain unpredictable things, enhances comprehension of L2 vocabulary by allowing comparison between MT and L2 words; facilitates mutual understanding, decreases negative affective states, ensures equal opportunities, saves time and helps assessment. Similarly, Lo (2015) examined teachers' MT use with low level and high level students in an English L2 classroom in Hong Kong. Results of her study showed that teachers made significant use of MT for explaining the content, and interaction with low level students, but made lower use of MT for vocabulary translation of L2 words with advanced level students. Bruen and Kelly (2014) have also shown that MT serves to alleviate stress and make classroom atmosphere conducive for learning. Their study in an Irish higher education context showed that MT use facilitated complex problem solving tasks by reducing cognitive load and relaxing the classroom atmosphere.

In addition, research has shown that MT contributes to constructing a shared perspective, managing classroom activities and establishing and maintaining social relations within classroom (Anton & DiCamilla, 1999; DiCamilla & Anton, 2012; Levine, 2011). For instance, Anton and DiCamilla's (1999) seminal study investigating the sociocognitive functions of learners' MT in L2 classroom in Spain showed that students' use of MT not only provided scaffolded support but also allowed learners to create a shared perspective for successfully performing a task. Likewise, Levine's (2011) study in a somewhat similar context also reported that both Spanish and French L2 learners made use of MT mainly for task completion and socializing with peers. Another important study by DiCamilla and Anton (2012) confirmed that MT helped managing, defining and planning the task as well as maintaining and establishing friendly relations with classmates. The study reiterated the argument that MT possesses immense communicative, cognitive and pedagogical value in L2 learning. However, it is noteworthy that only a few studies have examined the role of MT in promoting intersubjectivity in L2 learning context (Anton & DiCamilla, 1999; DiCamilla & Anton, 2012; Levine, 2011).

Finally, language also performs intra-psychological functions, such as private speech (PS) and inner speech (IS). PS is distinguished from inner speech (IS) on the basis of the developmental stages they appear in the process of internalization. Private speech is defined as, 'audibly or sub-vocally

articulated speech directed to oneself, sometimes referred to as egocentric speech' (Guerrero, 2018, p. 2). Inner speech, on the other hand, is defined as the silent, inaudible self-directed speech, also referred to as inner voice (Guerrero, 2018). According to Wertsch (1985), private speech is an intermediary stage in transition from external to inner speech (p. 111). The function of both forms of speeches is the cognitive regulation, that is, to control and manipulate human thought processes. Studies into PS suggest that learners' use of MT for PS depends on the level of their L2 proficiency. For example, Centeno-Cortés and Jiménez (2004) conducted a study into private speech of advanced and intermediate level students Spanish-L2 English-MT students. Results of the study showed that advanced level students' reliance on MT for PS was limited and depended on their L2 proficiency and the level of the difficulty of task, while intermediate level students resorted to MT for PS while reading and understanding the text, formulaic expressions and talking about the task. The study, therefore, reinforced the crucial role of MT PS in L2 learning. Literature shows that MT plays a significant role in facilitating L2 learning, performs a number of inter- and intra-psychological functions, including scaffolding, inter-subjectivity, and private speech respectively.

However, the potential of SCT for explicating sociocognitive functions of MT has long remained underexploited. While much of previous research has been concerned about the attitudes of learners and teachers about MT use (Duff & Polio, 1990; Macaro, 2001; 2005; Mansoor, 2004; Shvidko, 2017), very few studies have adopted SCT to explore the sociocognitive functions of learner's MT. Secondly, while previous studies have examined MT in L2-learning oriented contexts wherein the focus of learning was the TL itself, there is need for studies exploring the sociocognitive functions of MT in an advanced level classroom wherein the main focus of learning is the content of subject rather than L2 per se. This study, therefore, aims to examine the sociocognitive functions of MT, especially, intersubjectivity, scaffolding and private speech in a postgraduate business classroom in Pakistan. Most specifically, this study aims to answer the following questions:

1. What is the frequency of postgraduate business students' MT in an EMOI classroom?
2. How does postgraduate business students' MT perform sociocognitive functions in an EMOI classroom?

Methodology

The study aimed to examine the amount and sociocognitive functions of advanced-level postgraduate business students' MT in a content-oriented EMOI classroom. Part of the data used in the current paper was obtained for a larger study exploring postgraduate students' willingness to communicate in English as a foreign language in Pakistan (i.e. Author, 2016). The objectives of the current paper are radically different from the original project.

Context

The study was conducted in the Business Communication (BC) class in the second semester of master of business administration (MBA) program at a Public Sector University in the Sukkur region of Pakistan. The BC module was aimed at developing students' theoretical understanding of the process of communication and enhancing their practical skills for written and oral communication at workplace. Thus, BC was selected as the site of observing students as it was likely to elicit more communication compared to other content-driven courses, including: Introduction to Marketing, Principles of Macroeconomics. All the courses were taught and assessed in English. Students had to have a bachelor's degree as their previous qualification to be eligible to attend this program. The classroom consisted of 45 students from a variety of linguistic backgrounds, including Sindhi, Urdu, Punjabi, Balochi, Brushaski and Siraiki. Classroom discussions were based on pre-assigned textual topics. Interaction in the classroom was predominantly whole-class teacher-fronted with rare instances of group work. However, students occasionally performed activities, including impromptu presentations, role plays and debates. The module was led by a teacher named Ishaq (pseudonym) possessing a master degree in literature, a diploma in ELT, and seven years' experience of English language teaching and four years' experience of teaching the BC. One of the classes (4th observed class) was conducted by a substitute teacher, named Saqif (pseudonym) who possessed a master's degree in literature and an M.Phil. in Applied Linguistics from a top-notch university in the country.

Participants

In consonance with its aims, the study adopted purposive sampling inviting postgraduate students, aged between 21 and 23 years, attending the BC class. Participants were advanced level learners of English with over 10 years' experience of learning English. While they spoke Sindhi as their mother tongue, they displayed native-like proficiency in Urdu which served as the national lingua franca. Participants' written consent was obtained before the data collection. Table1 below presents participants biographic information.

Table 1. Participants' Biographic Information

Participants	Age	MT	English language learning experience (in years)
Fiza	22	Sindhi	10
Sakina	21	Sindhi	12-13
Areeba	23	Sindhi	12-14
Qambar	23	Sindhi	10-15
Uzair	21	Sindhi	10
Adil	22	Sindhi	10

Data Collection Methods

Students were observed in the BC class for fourteen BC classes over nine weeks. Each classroom session (i.e., 120 minutes) was video-recorded. StRs were conducted to further explore the sociocognitive processes that underpinned learners' MT use. While it is advisable to conduct StRs soon after the classroom observations (Gass & Mackey, 2000), the first two rounds of StRs were conducted after every six class observations, while the last round was conducted within two days of the class observations due to peculiarity of the context, such as participants' unavailability during their midterm exams and busy academic schedule during the weekdays. Instances of participants' MT use were identified and agreed upon by the researchers before the interview. During the interview, participants were shown videos of the specific instances of their MT use in the class and asked to comment as to why they used MT at that specific moment in class. Participants were allowed to stop and play the video as and when they liked to share their reflections about their MT use. StRs were conducted in participants' mother-tongue to elicit authentic responses from them. Their responses were recorded in the digital voice recorders for the purposes of data analysis.

Data Analysis

First, the video-recordings of the participants' classroom communication were watched repeatedly and independently coded and analysed by the researchers using a generic rubric adapted from Anton and DiCamila's (1999) study. Instances of sociocognitive functions of MT use for each participant were calculated within a class and over fourteen classes (Cohen, Manion & Morrison, 2011). For example, the instances of MT use included translation, information, humour, disagreement, confirmation, informal chat, and private speech were calculated within a classroom session and over fourteen observed classes. The data from StRs was transcribed verbatim and independently analysed and coded by respective researchers using qualitative content analysis approach (Krippendorff, 2004) to examine the instances of intersubjectivity, scaffolding and private speech within and across fourteen classes. For example, instances of translation from English to Sindhi or Sindhi to English were categorised as scaffolding; while instances wherein participants used Sindhi for negotiating meaning, sharing information, using humour, disagreement, confirmation, informal chat, were classified as intersubjectivity; and, instances wherein participants reported that they mumbled or spoke to themselves in Sindhi were classified as PS. The data from an individual participant was constantly compared with data from other participants to examine the individualistic features of participants' Sindhi. Using the coding reliability formula: number of agreements/total number of agreements-disagreements (Miles & Huberman, 1994, p. 64), 90% agreement was achieved in codes.

Findings

Amount of MT use in L2 Classroom

The observational data show that the number of participants' utterances in English was significantly higher than their utterances in Sindhi inside the class. For example, the sum total of participants' utterances across the fourteen classes was 2679 and 440 utterances both in English and Sindhi respectively. The total amount of Sindhi use in the class was around 14% of all the utterances. In other words, approximately one in every six utterances made by the participants involved Sindhi. Table 2 below displays the frequency of each participant's use of English and Sindhi over fourteen classes.

Table 2. The Frequency of Participants' Sindhi and English use in Fourteen Classes

Participants	Total instances of oral communication (Sindhi+English)	English use	Sindhi use
Sakeena	815	726	89
Fiza	725	659	66
Areeba	598	519	79
Qamber	410	325	85
Uzair	347	300	47
Adil	224	150	74

The table above shows the lower amount of each participant's utterances in Sindhi compared to their English. At an individual level, the amount of participants' Sindhi ranged between 10 and 33 per cent of their entire communication across fourteen classes. Table 3 below illustrates the percent of Sindhi use by each participant.

Table 3. The Per Cent of Participants' MT and L2 use in Fourteen Classes

Participants	Per cent of Sindhi (MT) use	Per cent of English (FL) use
Fiza	10%	90%
Sakeena	11%	89%
Areeba	13%	87%
Uzair	14%	86%
Qamber	21%	79%
Adil	33%	67%

Based on the observational data, Adil made the highest use of Sindhi (i.e., 33%) compared to other participants. In his StRs' he explained that he is silent and introvert by nature and feels comfortable in communication in Sindhi than L2. Similarly, despite his high English proficiency, Qambar also made frequent use of Sindhi (i.e., 21%). His explanation was that he talks when he is invited by the teacher or addressed by the peers. In his own words, 'I prefer to make use of the same language that my interlocutor is using during conversation'. Uzair's classroom communication over fourteen classes comprised 14% of Sindhi use sometimes because of his inability to express his thoughts in English while sometimes to share a joke with peers. Areeba's used Sindhi (i.e., 13%) to offer a peer a help in understanding a concept and mostly in group work. She said, 'it sounds unnatural to interact in English in an informal group work setting'. Conversely, both Fiza and Sakeena used Sindhi (i.e., 10% and 11% Sindhi use respectively) across fourteen classes. In their interviews, both of them defined themselves as sociable and talkative. Sakeena said she employs Sindhi for seeking clarification of ideas from peers, preparing for a class talk and/or off-task chatting with neighbors. Fiza also provided similar reasons for MT use.

Sociocognitive Functions of MT

The data from classroom observations suggest that participants used their Sindhi for intersubjectivity, scaffolding and private speech. Table 2 below illustrates the frequency of each sociocognitive function of participants' MT use in class.

Table 4. Frequency of MT Functions in Class

Student name	Intersubjectivity	Scaffolding	Private speech
Sakina	65	19	05
Fiza	35	31	00
Areeba	50	23	06
Adil	41	29	04
Qamber	54	31	00
Uzair	27	18	02
	Total= 272	Total= 151	Total=17

Inter-Subjectivity

The most frequently observed function of participants' Sindhi use was intersubjectivity. Sindhi facilitated inter-subjectivity; that is, it created social space between interlocutors for mutual learning. Inter-subjectivity was arrived at in a number of ways, including code switching, use of humour, off-task informal chat, and specific nature and demand of the task. Most of the times, the participants switched from English to Sindhi to create a level playing field with the interlocutors. That is, if an interlocutor used English, the participants used English, while they felt obliged to switch to Sindhi when their interlocutor(s) used Sindhi. Some of the participants also reported that they relied on Sindhi for private talk with neighbor/peers in the class. Most importantly, both teacher and participants made use of Sindhi to share jokes, make fun of other students, and lighten the stressful classroom atmosphere. For instance, during a conversation in the fourth observed class, Adil wanted to make a joke to make his peers laugh. However, he felt that if he wasted time to articulate his thoughts in English, his motive to make his peers laugh would not be served. He, therefore, decided to switch to Sindhi to share that joke.

Another specific manifestation of intersubjectivity was observed in students' informal conversation in a group while preparing for a task. The teacher asked the students to perform a role-play in English (L2) based on a textual topic involving hierarchy of communication within an organisation. Divided into groups, students were to plan the task, including plot, characters, and dialogues within 15 minutes. An excerpt of the discussion of one of the groups is presented below,

Excerpt 1

1. *Student-1 (Sakina): Na na. Director CDC de case na mokleendo aa. Paan ee approve kando aa.*
1. Student-1 (Sakina): No no. The Director never refers such cases to the CDC department. He just approves the case by himself.
2. *Student-2: Peon kair theendo?*
2. Student-2: who will play the peon?
3. *Student-3: Hin khe disso [pointing to a student named Imran]. He laghe bi tho peon.*
3. Student-3: Look at him [Student-2]. He looks like the peon. [General laughter]
4. *Student-4 (Areeba): Par Imran ta installment khani aayo huyo*
4. Student-4 (Areeba): But Imran had to come with the installment application.
   [Group members interrupt]
5. *Areeba: yaar budho ta, please! Please pehryaaan budhho*
5. Areeba: Listen friends! please! please! Listen to me first!
   [Teacher tries to barge in the group circle]
6. Teacher: Stand apart, please. I don't know what force glues you together!
   [Areeba switches to English]
7. Areeba: You and Prinka are going…I mean, coming, for the installment, right! And who is sir Mansoor?
   [The teacher walks away]
8. *Student-5: karno cha he, budhayo ta.*
8. Student-5: Please tell us! What are we supposed to do?
9. *Areeba: Disso tawhan baee eendao maslo discuss karan hinan de….*

9. Areeba: Look you both would come to discuss the issue with them.

Since the purpose of the activity was to plan and execute the role-play better than other competing groups, a shared understanding of the activity was necessary for a smooth and successful execution of the role-play. Students used Sindhi as their default choice while planning the task. Thus, Sindhi helped to develop consensus over the precise aims and objectives of the activity, reduced cognitive stress, and facilitated the task to be performed in front of the whole class. The shared understanding was arrived at by interpersonal disagreements (line 1), jokes (line 2), suggestions (line 3), requests (line 5), and questions (line 8), clarifications (lines 4 & 9), and interruptions. Furthermore, while the conversation was mainly in Sindhi, it was also interspersed with instances of code switching between Sindhi and English. For instance, students used L2 nouns, such as issue and installments (line 4); peon, (lines 2 & 3); and verbs, including approve (lines 1) and discuss (line 9) in a conversation predominantly in participants' MT. Especially when the teacher arrived to monitor the activity, Areeba switched to English (line 7) because the teacher addressed the group in English (line 6). However, when he left, the students switched back to Sindhi. Thus, the Excerpt#3 clearly illustrates the complex process of intersubjectivity and the multifarious functions MT performed in the planning phase of the task.

Scaffolding

Another important function of participants' MT use included offering linguistic and/or non-linguistic support or seeking support from peers. Sometimes participants used MT to support a peer struggling in a task, while at other times they used MT to seek linguistic or non-linguistic help from the teacher or peers. For example, Areeba was not willing to participate in class discussion because she did not know the meaning of 'intimate'. She began to participate in the discussion only after her friend translated the word in her MT, i.e. Sindhi. Similarly, Adil reported that he was excited to participate in the discussion but he did not know the meaning of 'superstition'. Failing to get the translation from the teacher, he asked his peers for help. The following excerpt illustrates Adil's struggle to learn the meaning and the process of scaffolding.

Excerpt 2

1. Teacher: Superstitions. We have seen many social evils and instances in our society and the societies like ours.
2. *Adil: eho cha theendo aa, Sir. Sir, in khe thoro explain kayo na?*
2. What is that, Sir? Kindly explain the word a bit more!.
3. *Student: Wahem*
3. Student: Superstition.
4. *Teacher: Superstition, beta maan jiyein budhayo, black cat crossing your path..*
4. Teacher: Superstition, as I said earlier, my child, black cat crossing your path..
5. *Students: jiyein weham thi weendo aa, Sir!*
5. Like when we are overwhelmed with the fear of something; that's superstition.
6. Teacher: yes, *wahem*, superstition.

The conversation between the teacher and students was predominantly in English. However, Adil asked for translation in Sindhi (line 2), and in response, the teacher and the students also switched from English to Sindhi respectively and tried to translate the word for Adil helping him to participate in the discussion. His peer (lines 3 & 5) translated the word in Sindhi, followed by an exemplification by the teacher (lines 4 & 6)). Adil recounted this event in the interview saying that So when the teacher and other students translated and interpreted the meaning for me, I made sense of the meaning, finally. The excerpt shows that scaffolded help in MT by interlocutors enhanced Adil's vocabulary and maintained his motivation to participate in the discussion. Thus, MT use not only ensured accessibility to the lexical resources of TL but also created intersubjectivity.

Private Speech (PS)

Some of the instances of private speech were also observed in the data. Participants reported that

they used PS for a number of functions, including verbalisation of agreement (e.g., *hmm*), shock (e.g. *oho, huh*?), surprise (e.g. *achaa*), as a self-directed response to a conversation between teacher and other students. For instance, in the class on letter writing, a student volunteered to read out her complaint letter on rescheduled class. The subject line of her letter read as 'complaint against the discontinuous classes'. As soon as she had read it out, Areeba interpreted the words using PS, '*matlab* [meaning] rescheduled classes'. Her utterance was not aimed at correcting the student but a self-directed clarification of the correct expression of the idea. Also, participants used PS to persuade or dissuade themselves from participating in a certain task. For instance, Sakina recounted that when the students were asked to volunteer to read out the emails they had sent to the teacher, she was constantly dissuading herself from volunteering to read her email because she believed her email might have some mistakes which could be made fun of. In her own words, …I said to myself '*pare, pare*' [stay out of this], in order to feel safe.

The quote shows that her MT was self-directed to prevent herself from participating in the activity. In another instance, Areeba because she was sitting on the back benches, she could not understand teacher's instructions on the task. Since she could not dare interrupt the teacher while he was talking, she uttered to herself '*cha tho chawe*?'[What is he saying/asking to do?]. Thus, Areeba's PS in MT was aimed at self-regulating her thinking while trying to understand the teacher's instructions.

Discussion

The study adopted SCT framework to examine the amount of MT and TL use, and sociocognitive functions of postgraduate business students' MT in a university classroom in Pakistan. The present study, however, examined the extent of individual learners' MT use and showed that postgraduate learners' amount of MT use was much lower (14%) than their English (86%) use in the classroom. The possible reasons for the lower MT and higher English use might be: Participants' advanced level of study, and long experience of English language learning. That is, participants of the current study were postgraduate students with 16 years of prior education and more than 10 years' experience of L2 learning. The study shows partial agreement with DiCamilla and Anton's (2012) study which showed that fourth year learners of Spanish as L2 used lower MT (3%) than the first year learners of Spanish (70-80%). Thus, learners' MT use in English classroom is proportional to the level of learners' study and experience in learning English language.

The study showed that MT performed three sociocognitive functions, such as intersubjectivity, scaffolding and private speech to facilitate English learning in the classroom. Learners resorted to MT to provide scaffolded help to their peers. For instance, MT supported students' comprehension and production of English, alleviated anxiety, kept their motivation to participate in a task intact, and enabled them to maintain conversation in English. Some of the participants used MT to help their peers struggling with vocabulary in English, while others used MT during a conversation to get their ideas across to their peers. Previous studies in ESL and EFL (Al-Ahdal, 2020; Anton & DiCamilla, 1999; Bhooth, Azman, & Ismail, 2014; Cao, 2009; Tamim, 2020) have also shown that translating an L2 word or providing a peer with a lexical item supported learning by enabling learners to make authentic and optimum use of opportunities to use TL.

The study also shows that participants preferred to use MT while planning for a task in order to arrive at a consensus regarding the execution of the task. The complex process of developing intersubjectivity through MT involved agreements, disagreements, interruptions, questions, clarifications, and humour. Most notably, MT served as the main tool for humour, such as making jokes, mocking and taunting peers, which in turn helped to make the task interesting, reduce communication apprehension, and develop group cohesion. The examples presented in the data show that MT was used for culture-based humour imbued with cultural connotations. In Excerpt#1, for instance, resemblance with a peon is involves cultural connotations since the job of a peon is regarded as a mark of poverty and lower social status. The immediate laughter of the group members in both examples showed an implicit acknowledgement of the intended humour. The current study, therefore, extends the concept of intersubjectivity by exploring culture-oriented humour in MT as one of its main tools. Additionally, participants preferred to use MT if their interlocutors communicated in MT, while they switched to English if/when their interlocutors did so in a conversation. It could be

explained as an interactional strategy to maintain the flow of conversation and indicate a shared linguistic identity with the interlocutor since conversation in two mutually exclusive languages might deteriorate the chances of reaching a consensus necessary for the successful completion of a task.

In addition, it was also noticed that even participants with relatively better English proficiency relied on their MT for PS. For example, results show that despite their relatively higher English proficiency, both Sakina and Areeba's PS was predominantly in their MT. The possible reason for PS in MT could be the MT dominance in the daily informal interaction. These findings also resonate with Jimnez-Jimnez's (2015) study. His study with 30 adults Spanish L2 learners reported that despite their higher proficiency in L2, students' private speech was mainly in their MT due to language dominance (i.e. degree of daily use or confidence in using a language). Also, given the fact that the class discussion in the present study was mainly content-based rather than language oriented, most of the instances of PS reported were not directly related to linguistic or metalinguistic issues, including translating the text or vocabulary or grammar practice (Guerrero, 2018). The functions of PS in the current study categorically differed from the functions highlighted in previous research. For instance, studies have shown that learners' cognitive regulation involved planning, managing the thought, self-orientation, motivating, and controlling anxiety among many other functions (Guerrero, 2018; Sarab & Gordani, 2015). The present study, however, explored that learners used PS while persuading themselves to participate in an activity they were interested in, or dissuading themselves from an activity involving a face threat. In addition, participants also resorted to PS when they failed to get their ideas across to the interlocutor due the latter's lack of attention or the distance between the two. Thus, the data in the current study shows no direct relation between PS and English learning in the class.

Implications and Conclusion

The findings of the present study resonate with that of previous research in ESL and EFL contexts. Studies in ES/FL contexts have shown that MT plays a significant role in making second/foreign language learning conducive by enabling learners to help peers and get help from peers in comprehension and production of TL (Al-Ahdal, 2020; Ashraf, 2017; Channa et al., 2017; Debreli, 2016; McMillan & Rivers, 2011). Moreover, it also reduces their cognitive load and alleviates anxiety (Bruen & Kelly, 2014; DiCamilla & Anton, 2012; Levine, 2011; Tamim, 2020). Most importantly, research has also shown that the use of humour in the classroom enhances learners' sociolinguistic competence and contributes to the classroom culture by encouraging students to seek and exploit opportunities to participate in communicative activities involving the use of L2 (Reddington, 2015). Teachers are, however, warned to make careful use of humour in classroom because it has the power to amuse some while hurt others at the same time. Therefore, teachers need to be not only aware of the amount of learners' MT use but also of the sociocognitive features of MT use, especially scaffolding, intersubjectivity and PS inside classroom. They must be informed that imposing a complete abstention of MT use deprives students of scaffolded help; reduces motivation and willingness to engage in class discussion; aggravates cognitive stress; obstructs intersubjectivity, and blocks the self-regulation of thoughts.

Most notably, in order to make judicious use of MT in the classroom possible, teachers are advised to identify learners' proficiency level as well as raise their metalinguistic awareness enabling them to make use of their linguistic repertoire (Ashraf, 2017; McMillan & Rivers, 2011). McMillan and Rivers (2011) suggested that in order to identify learners' level of proficiency in TL, the teachers can employ a language use scale with categories including 85-90% as low, 90-95% as intermediate and 95-100% as high levels of L2 proficiency respectively. In the current study, for instance, four participants displayed intermediate level of proficiency (i.e., 86, 87, 89, and 90 per cent respectively) in TL, while the rest exhibited low level proficiency (i.e. 67 and 79%) (See Table 4). Thus, teachers in the current and similar contexts ought to be aware of learners' use of linguistic resources to provide necessary help in vocabulary and grammar, and encourage more use of the TL. It must be acknowledged that decisions involving the use of MT, and the extent of its use in the class are chiefly taken at the administrative and policy levels. Although some empirical evidence is available, yet more context-specific evidence of the supportive role of MT with locally relevant techniques is required to make

dents into the English-only orthodoxy at all levels, i.e. classroom, institution, teacher education, and educational policy (Shvidko, 2017). This might also help the educational policy makers to revisit EMOI policy in order to enable students to enhance their content understanding and improve their credentials.

Using SCT, the current study showed that postgraduate business students' MT use serves important functions, such as scaffolding, intersubjectivity and private speech. The study, therefore, advocates a cautious rather than an unconditional use of MT. Future research can further investigate sociocognitive functions of MT use in other content-oriented EMOI classes in other sociocultural contexts. Lastly, this study aimed to get in-depth and holistic understanding of the sociocognitive functions of postgraduate business students' MT use in content-oriented EMOI classroom; therefore, more studies in similar contexts are required to confirm the generalisability of this study's findings.

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Appendix 1 Observation Sheet

Class time	Sakina			Fiza			Areeba			Adil			Qamber			Uzair		
	InS	Sc	PS	InS	Sc	PS	InS	Sc	PS	InS	Sc	PS	InS	Sc	PS	InS	Sc	PS
05																		
10																		
15																		
20																		
25																		
30																		
35																		
40																		
45																		
50																		
55																		
60																		
TOTAL																		

Abbreviations: InS: Intersubjectivity
Sc: Scaffolding
PS: Private Speech