

The development of Strategic Competence in oral interaction

A contrastive analysis of face-to-face communication and synchronous computer mediated communication.

Karianne Eugenie Stormo Scheie

Dept. of Language Education
Course code USX2AK
Degree project 15 hp, second cycle
Language Education
Autumn 2018
Supervisor: Laura Sánchez Pérez



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Abstract

The empirical study carried out in this degree project is exploratory, and its main objective is to investigate the development of strategic competence in oral production as it occurs in two different communication modes, namely, *synchronous computer mediated communication* (SCMC) and *face-to-face* (FTF) communication. More specifically, this study compares the instances of different communication strategies (CS) used to negotiate meaning. This aim was approached through the following research questions: RQ (1): Which types of communication strategies do Swedish learners of English use to enhance interaction in different communication modes? RQ (2): How frequently do they use these strategies in each communication mode? RQ (3): Which communicative mode creates an environment more favorable for the occurrence of NofM?

The results of the study demonstrated that the CS the participants used were: *clarification request*, *appeals for assistance*, *confirmation check*, *provision of assistance*, *self-correction*, *use of Swedish (L1)*, *topic shifting* and *circumlocution*. The latter two were only used in FTF communication, making this the communication mode with the highest variety of CS types. Concerning our second RQ the frequency of usage of the aforementioned CS, the results suggest that the frequency differed between the two communicative modes a part from *appeals for assistance* and *provisions of assistance*. In turn, self-correction, topic shift and circumlocution had a higher frequency in FTF communication, whereas clarification requests, confirmation checks and usage of Swedish had a higher occurrence rate in SCMC. Concerning our third RQ on the one hand, the results in favor of FTF communication were reflected in the higher response rate of appeals for assistance and the use of circumlocution. On the other hand, the results supporting SCMC were seen in the higher frequency and especially in the use of the L1, in the lesser occurrence of self-correction of faulty forms, as well as the higher number of turns per minute and higher percentage of turns used for CS. Based on these results, the present study would seem to point at SCMC as the most favorable communication mode for NofM.

Keywords

Strategic competence, NofM, communication strategies, interaction, SCMC

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List of abbreviations

CEFR	Common European Framework of Reference for Languages
CLT	Communicative language teaching
COLT	Communication-oriented language teaching
CS	Communication strategies
FTF	Face-to-face
NofM	Negotiation of meaning
SCMC	Synchronous computer mediated communication
SLA	Second language acquisition

1. Introduction

In today's curriculum for Swedish compulsory school there is a large emphasis on the students' digital competence as the use of digital tools has been growing immensely over the years (Skolverket, 2018). The curriculum specifically states that the school should provide all pupils with the "opportunity to develop their ability to use digital technology" as well as providing the necessary conditions for developing their digital competence (Skolverket, 2018, p. 8). Furthermore, the goal is that the digital tools should be used for "attaining knowledge, processing information, problem-solving, creation, communication and learning" (Skolverket, 2018, p. 10). This brings us to another pivotal aspect of the syllabus in the English language, namely communication. Both the syllabus (Skolverket, 2018) and the Common European Framework of Reference for Languages (CEFR, 2001), highly illuminate the communicative aspect of language. Moreover, to be able to communicate efficiently and successfully they both encourage the utilization of communication strategies. These strategies are to be taught to help the students to "understand and be understood when language skills are lacking" and in order to "vary, clarify, specify and adapt" their communication to different contexts (Skolverket, 2018, p. 34-35). Therefore, a main focus of language teaching today has to lie on developing the students' communicative competence. This can be accomplished by following the pedagogy of communication-oriented language teaching (COLT), which advocates both the development of communicative competence as well as the completion of tasks that provoke the students to negotiate and produce authentic-like conversation, which in turn facilitates second language acquisition (SLA) (Littlewood, 2013; Littlewood; 2004; Doughty & Long, 2003, p. 183). CEFR (2001, p. 57) further advocates that one of the best ways to measure progress in language learning is precisely through the use of communication strategies. The present study is therefore aiming to investigate the communicative competence displayed in face-to-face (FTF) interaction as well as through synchronous computer mediated communication (SCMC), to further broaden the ways in which we can use digital tools for language learning.

2. Background

This section will consist of defining the theoretical concepts in support of the foundation and analysis of the data gathered for the present investigation and research questions. Furthermore, empirical findings reported in previous studies will be presented and critically discussed.

2.1. Theoretical Background

A huge body of research backs the development of what has come to be known as the process of *negotiation of meaning* (hereafter, NofM). It has grown from the backdrop of research both within the fields of *second language acquisition* (henceforth, SLA) and the pedagogy of *communicative language teaching* (henceforward, CLT) (Doughty 2000, p. 50), and more recently referred to as *communication-oriented language teaching* (henceforth, COLT) (Littlewood, 2004, p. 326). Hence, the empirical findings reported in studies carried out within these fields have pushed the classroom

environment to become more communicative than the teacher-student interaction which characterized the teacher-centered teaching preceding these research findings (Doughty, 2000).

2.1.1 Negotiation of Meaning and Second Language Acquisition

NofM is a process “in which learners seek clarification, confirmation and repetition of second language utterances they do not understand” (Pita, 1994, cited in Yuksel & Inan, 2014, p. 336). The learners do this with the aim of reaching a “mutual understanding” (Doughty, 2000, p. 48). In other words, NofM helps learners to be able to communicate effectively despite communicative breakdowns. This process was deemed essential from a SLA perspective through what is known as the *Interaction Hypothesis*, which is grounded in the assumption that conversation is not only a medium for practice but is also how and when learning occurs (Doughty & Long, 2003, p. 183). To be more precise, the hypothesis advocates that conversation entailing negotiation of meaning “and especially negotiation work that triggers interactional adjustments... facilitates acquisition because it connects input, internal learner capacities, particularly selective attention, and output in productive ways” (Long, 1996, in Doughty & Long, 2003, p. 183). At the same time, the notion of NofM also informs present-day approaches to language teaching such as socio-cultural theory (for example, Vygotsky, 1994). As this regard, and elaborating on Vygotsky’s ideas, Cole et al. (1980, p. 86) discuss the notion of zone of proximal development (hereafter, ZPD), which they define as “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving (...) in collaboration with more capable peers”.

An example of these ‘interactional adjustments’, is a subtype of *communication strategies* (henceforward, CS) that are employed in order to solve communication breakdowns in various ways. Specifically, communication strategies address the issue of *how* the interlocutors negotiate meaning. There exist several different taxonomies to classify the different types of CS. The following Table 1 presents the taxonomy elaborated by Cohen (2010, p. 165-166), which demonstrates the most prominent CS. These CS underlie influential steering documents such as the Common European Framework of Reference for Languages (henceforth, CEFR, Council of Europe, 2001).

Table 1. Some frequently utilized communication strategies as categorized by Cohen (2010)

<p>Avoidance or reduction strategies</p> <p><i>Message abandonment</i>: leaving a message unfinished because of some language difficulty</p> <p><i>Topic avoidance</i>: avoiding topic areas or concepts which pose language difficulties</p> <p><i>Message replacement</i>: substituting the original message with a new one because of not feeling capable of executing it</p>
<p>Achievement or compensatory strategies</p> <p><i>Circumlocution</i>: describing or exemplifying the target word you cannot remember (for example, ‘the thing you open bottles with’ for <i>corkscrew</i>)</p> <p><i>Approximation</i>: using an alternative term which expresses the meaning of the word you cannot remember as closely as possible (for example, <i>ship</i> for ‘sailing boat’)</p> <p><i>Use of all-purpose words</i>: extending a general, ‘empty’ lexical item to contexts where specific words are lacking (for example, the overuse of thing, stuff, make, do as well as using words like ‘thingie’, ‘what-do-you-call-it’, ‘what’s-his-name’, etc.)</p> <p><i>Word-coinage</i>: creating a non-existing L2 word based on a supposed rule (for example, ‘vegetarianist’ for vegetarian)</p>

<p><i>Use of non-linguistic means</i>: mime, gesture, facial expression or sound imitation</p> <p><i>Literal translation</i>: translating literally a lexical item, an idiom, a compound word or structure from L1 to L2</p> <p><i>Foreignizing</i>: using an L1 word by adjusting it towards the L2 phonologically (that is, with a L2 pronunciation) and/or morphologically (for example, adding a L2 suffix to it)</p> <p><i>Code switching</i>: including an L1 word with L1 pronunciation or an L3 word with L3 pronunciation in L2 speech</p>
<p>Stalling or time-gaining strategies</p> <p><i>Use of fillers and other hesitation devices</i>: using filling words or gambits to fill pauses and to gain time to think (for example, well, now let me see, as a matter of fact, etc.)</p> <p><i>Repetition</i>: repeating a word or a string of words immediately after they were said (either by the speaker or the conversation partner)</p>
<p>Interactional strategies</p> <p><i>Appeal for help</i>: turning to the conversation partner for help either directly (for example, ‘What do you call ...?’) or indirectly (e.g., rising intonation, pause, eye contact, puzzled expression)</p> <p><i>Asking for repetition</i>: requesting repetition when not hearing or understanding something properly (e.g. ‘Sorry’, ‘Pardon’) <i>Asking for clarification</i>: requesting explanation of an unfamiliar meaning structure (e.g. ‘What do you mean?’, ‘The what?’)</p> <p><i>Asking for confirmation</i>: requesting confirmation that one heard or understood something correctly (e.g. ‘You mean’, ‘Do you mean?’)</p> <p><i>Expressing non-understanding</i>: expressing that one did not understand something properly either verbally or nonverbally (e.g. ‘Sorry, I don’t understand’, ‘I think I’ve lost the thread’)</p> <p><i>Interpretive summary</i>: extended paraphrase of the interlocutor’s message to check that the speaker has understood correctly (e.g. ‘So what you are saying is ...’, ‘Let me get this right; you are saying that ...’)</p>

It is important to mention that although the taxonomy here has a separate category for ‘interactional strategies’ other researchers, however, advocate that all CS are interactional in function (Tarone, 1981, in Lee 2001, p. 234), as both hearer and speaker adjust their output with CS to seek joint understanding through NofM. Using CS to provide negative feedback, i.e. state that something has not been understood, facilitates language learning because it enlightens the learner on what aspects of their L2 are not acceptable, and NofM through the usage of CS establishes comprehensible input (Long, 1996, in Yilmaz, 2011, p. 116).

2.1.2 Negotiation of Meaning in the L2 Classroom

The usage of both verbal and non-verbal CS “that may be called into action to compensate for breakdowns in communication due to performance variables or to insufficient competence” in the L2, as well as strategies to enhance the effectiveness of communication is what has been defined as *Strategic Competence*, one of the four competencies belonging to *Communicative Competence*¹ (Canale, 1983, p. 9; Canale & Swain, 1980, p. 30), the competencies that a communicative classroom aims to develop (Littlewood, 2004). Therefore, the findings pointing at the importance of interaction, NofM and thereby the utilization of strategic competence as a necessary condition for SLA to occur

¹ The other three competencies are: *linguistic, socio-linguistic and discursive competence* (Canale & Swain, 1980).

triggered research into the communicative classroom. More specifically, this kind of research was guided by a question inquiring which type of interaction would most likely lead to NofM, and how could this be incorporated in the second language classroom.

The occurrence of NofM is caused precisely by the communication breakdowns we have mentioned above, which in turn is also associated with the purpose of completing a task (Doughty, 2000, p. 54). As a result of the interest in this, research into which task-types elicit the most instances of NofM have proliferated. The findings concluded that without a certain level of task-complexity one interlocutor would be able to solve the problem on its own, and little negotiation would occur (Pica & Doughty, 1985, in Doughty, 2000, p. 55; see also Yilmaz, 2011 and Yimaz & Granena, 2010). Further research done on different task types as well as comparisons of teacher-fronted tasks vs. small groups found that if NofM is the goal of the task the task should:

be designed to be carried out in a small-group format and (a) should incorporate a requirement for information exchange such that no task participants may opt out of the interaction and (b) should have a convergent goal which all participants will be able to recognize as having been accomplished. (Doughty & Pica, 1986; Long, 1989; Pica, Kanagy, & Falodun, 1993 in Doughty 2000, p. 55)

The pedagogy emphasizing the use of tasks, specifically the information-gap tasks described in the quotation above, became known as *task-based language teaching* (TBLT) (Ziegler, 2016). After some time, Littlewood (2004, p. 326) proposed the term COLT to label the teaching instruction that focuses on both developing *communicative competence* as well as *task-based language teaching* (see also García-Mayo, 2011). Littlewood (2013, p. 9) further argues that we are in a post-method era, where one is not attempting to discover the sole best method for creating a communicative classroom, rather the purpose is to outline certain principles that teachers can use as an aid to sensitize their pedagogy for their individual context. Therefore, he has created the “Communicative Continuum” as a basis for COLT (Littlewood, 2013, p. 12). This continuum is presented in Figure 1 below, and it is in line with the emphasis of communication in the curriculum (Skolverket, 2018), following this pedagogy entails that the main goal is *effective communication* (CEFR, 2001; Littlewood 2004; Littlewood 2013). Thus, this pedagogical approach is in line with all the findings mentioned above; the interaction hypothesis, negotiation of meaning, and the necessary component of strategic competence for the use of a varied array of CS.

Figure 1. The 'Communicative Continuum' as a Basis for COLT adopted from Littlewood (2013)

Analytic Strategies		← →		Experiential Strategies	
Non-communicative learning	Pre-communicative language practice	Communicative language practice	Structured communication	Authentic communication	
Focusing on the structures of language, how they are formed and what they mean, e.g. substitution exercises, inductive 'discovery' and awareness-raising activities	Practising language with some attention to meaning but not communicating new messages to others, e.g. describing visuals or situational language practice ('questions and answers')	Practising pre-taught language but in a context where it communicates new information, e.g. information gap activities or 'personalised' questions	Using language to communicate in situations which elicit pre-learnt language but with some degree of unpredictability, e.g. structured role-play and simple problem-solving	Using language to communicate in situations where the meanings are unpredictable, e.g. creative role-play, more complex problem-solving and discussion	
Focus on forms and meanings		← →		Focus on meanings and messages	

2.1.3 Negotiation of Meaning in Synchronous Computer Mediated Communication

As stated above, the interaction hypothesis has been imperative in various research directions on language teaching and learning, and oral face-to-face (hereafter, FTF) interaction. As the research body on NofM in interaction grew, it became apparent that today it is not only relevant to apply the research findings to regular FTF communication. Meaning, a new communication mode is rapidly spreading which is that of *computer mediated communication* (CMC).

CMC is divided into two modes, *asynchronous* and *synchronous* mode, where the latter has the most in common with oral FTF communication (Yilmaz et al., 2010, p. 21). *Synchronous computer mediated communication* (SCMC) entails that the messages go back and forth between interlocutors in real time, without delay (Yilmaz et al., 2010, p. 22). Some of the characteristics that define oral FTF communication, for example, "short turns, immediacy, discourse informality" are also present in SCMC communication, which makes the two modes comparable (Yilmaz et al., 2010, p. 22). There are now numerous studies that have sought out to apply the interaction hypothesis to the digital environment of SCMC (See, for instance Blake, 2000; Fernandez-García & Arbelaiz, 2003; Heins, Duensing, Stickler & Batstone, 2007; Lee, 2001; Yilmaz, 2011; Yilmaz et al. 2010; Yuksel & Inan, 2014; Wang, 2006). This section will therefore consist of mapping out some of the previous studies that have been done concerning NofM in FTF communication vs. SCMC.

Firstly, scholars began investigating whether NofM could be found to occur in a similar manner through SCMC as in FTF communication. Blake (2000) carried out a study with fifty intermediate L2 Spanish learners using a SCMC chat program to investigate if the interaction hypothesis was applicable to the SCMC environment. To this aim, the author analyzed instances of NofM in a SCMC environment with the purposes of finding out whether these occurred in a similar manner as in oral FTF conversation. His findings concluded that the students did negotiate for meaning and even though this is a study done on written production, one of the main findings is relevant for all types of SCMC: namely, that it is significantly advantageous because it does not have the limitation of being restricted

to communication inside the classroom (Blake, 2000, p. 121). As such, it has the possibility to provide learners with more frequent opportunities for NofM (Blake, 2000, p. 121). Along similar lines, Wang (2006) came to the same conclusions in an investigation of NofM during task completion via videoconferencing with students studying a long-distance course. Wang (2006, p. 140) concludes that videoconferencing enabled the participants to “modify their interaction when there was a breakdown in task-completion, thus facilitating L2 acquisition”. To put it another way, NofM and the use of CS occurred, and they enhanced communication, learner-learner interaction, and consequently, also language learning.

Further research has addressed the different *types* of NofM that occur during SCMC, or said differently, which type of communication strategies are used more frequently. Heins, et al. (2007) investigated learners’ use of the L1 in online oral tutorials and regular FTF communication. Their findings revealed that the investigated learners of L2 German using online SCMC were less likely to switch to their L1 than learners engaging in FTF communication (Heins et al., 2007, p. 291). This finding suggests that they were employing other strategies to deal with communication breakdowns, thereby they had a larger amount of both L2 input and output during interaction. Another author, Lee (2001), investigated the communication strategies used by L2 learners of Spanish during interaction via a chat program called ParaChat. Her findings conclude that the students employed many of the same communication strategies common to FTF communication (see Table 1), namely comprehension checks, clarification requests, confirmation checks, use of L1, word invention, requests, approximation and self-corrections. Additionally, Lee (2001, p. 239-240) believes that learners interacting through SCMC are more likely to negotiate meaning rather than form. This was seen, for example, in the high rate of erroneous forms that were not corrected during the interaction, and also in the learners’ eagerness to respond to input quickly to “follow the flow”. However, she claims that further research is needed, comparing the strategies of online interaction and FTF interaction (Lee, 2001, p. 242).

Additional studies have compared SCMC to FTF interaction regarding the frequency of instances of NofM. In a study conducted by Yuksel & Inan (2014), FTF communication was compared with SCMC regarding the frequency of negotiation of meaning, and the frequency of *noticing*. In this study, the learners consciously noticed an episode of NofM and a communication breakdown in an analysis after task completion. The instances of NofM were conceptualized into three sub-categories of communication strategies: confirmation checks, comprehension checks and clarification requests (Yuksel & Inan, 2014, p. 336). The authors concluded that FTF was the mode of communication that produced the most instances of negotiation of meaning, whereas SCMC had the highest occurrence rate of noticing. Hence, the FTF communication resulted in a higher use of these three communication strategies to negotiate meaning. This is something that is also advocated by other scholars, such as Fernandez-Garcia & Arbelaiz (2003), who investigated NofM in FTF communication as well as the synchronous communication program Chatnet, where the groups of FTF also exhibited a higher frequency of NofM.

Most of the studies discussed above were conducted on online written communication not oral, with the exception of Wang (2006) and Heins et al. (2007), whose opinion we share that further research into the oral SCMC is necessary. Furthermore, there is a gap in research that compares the utilization of different communication strategies in both SCMC and FTF communication.

3. Aim and Research Questions

The empirical study carried out in this degree project is exploratory, and its main objective is to investigate the development of strategic competence in oral production as it occurs in two different communication modes, namely, SCMC and FTF communication. More specifically, this study compares the instances of different communication strategies used to negotiate meaning. This aim is approached through the following research questions:

- RQ(1): Which types of communication strategies do Swedish learners of English use to enhance interaction in different communication modes?
- RQ(2): How frequently do they use these strategies in each communication mode?
- RQ(3): Which communicative mode creates an environment more favorable for the occurrence of NofM?

Based on the previous research discussed in the former section, we expect the communication strategy types to be similar in both communication modes (see 2.1.3). In regard to the frequency of use, as stated earlier, there has not been an extensive amount of research done on the oral SCMC. However, following Heins et al. (2007) findings, we might expect to see the dyads in FTF communication rely on their L1 more than the SCMC group. Lastly, since there are studies advocating both modes as the most favorable for NofM, and little research has been done on the oral SCMC, it is difficult to propose a hypothesis concerning this RQ. Nonetheless, the literature review above reveals a slight tendency towards FTF communication as the communication mode that generates the highest amount of NofM, even though it has mostly been contrasted with written SCMC, we can assume to find a similar result in this study.

4. Method

This section outlines the methodology followed in the study. As such, it starts by describing the participants that took part in the study and the instruments employed in the data collection. This is followed by an explanation of the procedure employed in gathering the data, along with issues on the validity and reliability of the study and ethical considerations. The section closes with a thorough description of the methodology employed in the data analysis and the categories of analysis.

4.1. Participants

The present study was conducted in a public compulsory school located in the Nacka area, where the author carried out her practicum. The school is large with their 1170 students and 140 employees (Nacka kommun, 2017). Furthermore, the school has a strong IT profile, providing every student from grade 4-9 with their own personal device, either a Chromebook or Mac, and the remaining students have access to a number of iPads for use in the classroom (Nacka kommun, 2017). Therefore, all students were well acquainted with the use of digital tools in the classroom.

The study was conducted with 22 participants, all of whom were students of English in year 9 with Swedish as their L1. The participants received instruction in English 95 minutes per week. These minutes were distributed between two lessons per week. The lessons lasted for 55 minutes and 60 minutes.

4.2. Instruments

Following the COLT framework and the findings reported in research in NofM leading to information-gap tasks being deemed as the most suitable for occurrence of NofM (see 2.1.2), the chosen task is a jigsaw task called ‘The Fire-chief’ (see Appendix 1) adopted from Gilabert, Barón & Llanes (2009, p. 391). The decision to use this task-type was further motivated by the claims in the study by Pica, Kanagy & Falodun’s (1993), whose results demonstrated that the jigsaw task would facilitate more NofM than other kinds of information-gap tasks. Furthermore, this task is located between ‘structured communication’ and ‘authentic communication’ following the communicative continuum of COLT, both of which are located at the end of the spectrum focusing on meaning and messages (see Figure 1 in section 2.1.2).

A jigsaw task is a two-way information-gap task, where each participant in the dyad is given different information. Hence, each member of the pair will have to discuss and negotiate their information to complete the task (Pica et al., 1993). The jigsaw task in ‘The Fire Chief’ is expected to generate a great deal of interaction, because it is based on a ‘decision-making’ format (Richards, 2006) where the learners need to reach an agreement and make a decision. In this task, the participants receive a picture of a burning building with people trapped inside or on the roof. The participants are asked 1) to discuss an emergency reaction and decide on which actions they would take in order to save as many people as possible, 2) to specify in what sequence, and 3) to justify both the chosen actions and their sequence. Moreover, before making a final decision, they are expected to prioritize some actions over others depending on the different levels of risks for the people in the building, the limited resources, etc. The oral data and interaction elicited by means of this task make up the corpus analyzed in the present study.

4.3. Procedure

The participants in this study were divided into two experimental groups with two different testing conditions. One group for FTF communication and one group for SCMC. This division was done based on the participants already pertaining to two different classes of English year 9. Each group was then divided into pairs at random utilizing a random name selection program. The random selection was employed to avoid any bias from the investigator’s point of view and to create the most authentic conversation climate as possible. At this stage, there were seven dyads in each group, amounting to a total of 28 participants. The final total of participants included in the study, as mentioned above (see 4.1) was 22 students. This was due to technical issues which will be explained in the section for data analysis (see 4.5). Furthermore, for this study one session per control group was necessary for data collection, amounting to a total of two data collection sessions.

During the data collection sessions, the investigator introduced the task in a general manner as an activity to practice speaking in their L2 language English. The decision to not mention that it would be subject to analysis beforehand was taken with the intention of having the least amount of pressure put on the students as that may have affected their interaction. For example, it could make them focus on

producing language that the participants think that the investigator wants to hear, which would have made the results less valid.

After having introduced the task the investigator proceeded to give the students the instructions for completing the task, orally in front of each of the control groups. As mentioned previously, there are two drawings of a building on fire in each dyad, the drawings are slightly different, where the differing factors are the location of the people in the building, the number of vehicles available for rescue, where it is burning, as well as where the firemen are located. The participants in the dyad were not allowed to show their drawings to each other, consequently they needed to discuss how to most efficiently and safely evacuate the building, depending on the factors mentioned above.

The participants were allotted 7 minutes for discussion. This time limit was chosen because of the scope of the present study, the physical availability for data collection at the school, as well as considering it a sufficient amount of time to be able to gather data for analysis. This because, task completion was not a requirement, as the main purpose of the present study is instances of NofM.

The FTF pairs were given a separate room to enter one dyad at a time. The instructions were briefly repeated, and the participants were given their drawings. The investigator's computer was present to record them during their interaction. The computer was placed on a table in front of the learners making sure both students were visible and audible. Thereafter, the investigator started a timer and instructed the students to turn off the video when the timer went off. At that time, the investigator re-entered and repeated the same procedure with the following dyads. After every dyad had completed the task they were informed of the real purpose behind the task (see 4.5).

The SCMC pairs had been notified a day in advance that they all needed to have a skype-account and skype installed on their computer prior to the lesson the following day. Before the task was carried out the investigator instructed the participants how to record the skype conversation. Thereafter, the dyads were spread out in the classroom with sufficient spacing between them as to be able to interact undisturbed. One student per dyad left the classroom and found a quiet space in the hall to create an authentic video-conferencing situation where the interlocutors are not in the same room. The investigator was present in the classroom, to be able to instruct the students on what to do upon task-completion. However, the students were informed that they should not ask the investigator any questions as all questions related to what they were doing had been resolved beforehand. As with the previous group, when all the dyads had completed the seven-minute task interaction they were informed of the goal of the task (see 4.5).

As can be seen, the procedure for the two groups differ slightly. Firstly, the investigator was only present during the SCMC recordings. Secondly, the SCMC group were not located in a separate room as the students in FTF communication. This was mostly due to the physical inability of rooms available in the school. However, it was deemed as more imperative for recording purposes that the FTF groups enter a separate room. This because, it would have been impossible to record all FTF dyads interacting at the same time while also getting comprehensible data, without having them talk into a microphone (which would not make it an authentic FTF situation). Additionally, the investigator believes that the influence of having other dyads present talking at the same time would be greater in FTF, because the participants would not be wearing headphones which cancels out a certain amount of noise. Lastly, we believe that the presence of the investigator together with each dyad in FTF would have had a greater influence on the interaction as they were only two participants at a time. Consequently, the sense of being watched would have been greater, than in the classroom where the SCMC dyads were all talking at the same time, and the investigator had no possible way of focusing

on all of them at once, and had no intention of doing so. That said, in an ideal situation, each participant of the SCMC dyads would have been provided with separate rooms, to make the procedure as similar as possible. Another possibility would have been to give the task as homework, in this way the students could have done the skype session from their homes, thereby being in separate rooms.

4.4. Validity and Reliability

Validity refers to if the survey questions, or in this case task, measures what it is intended to measure (Ejlertsson 2014). The task employed in this investigation has been proven to provoke NofM and thereby the use of CS (see 4.2), therefore the author finds that the task is appropriate for measuring the amount and type of NofM. It is worth noting that it was not possible to receive the same amount of data from both communication modes, therefore the validity has been lowered somewhat. However, the author made analytical adjustments (as will be explained in 4.6) to be able to use the data for comparison.

Reliability concerns whether the same result can be obtained if repeated measurements are made on different occasions (Ejlertsson 2014). As previously mentioned, the author chose not to mention beforehand that the task the participants were conducting would be subject to investigation, in order to decrease the possibility of nerves or expectations to construe the participants' interaction, thereby enhancing the data's reliability. However, it is not possible to know whether the author's presence in the classroom during SCMC recordings influenced their interaction. But the author believes that due to no-one asking questions nor interacting with the investigator during the recording time, that the possible influence was kept at a minimum.

4.5. Ethical Considerations

As mentioned previously, the students were not informed beforehand that the task was to be used for investigative purposes. However, upon completion all students were informed of the real purpose of the task and that their participation was completely voluntary and anonymous. All students were then given a consent form to sign (see Appendix 2). The consent form informed the participants that I was writing a degree project about English language learning in Sweden as a part of my education at Stockholms Universitet to become a language teacher. It further explained that the aim of my study was to investigate the linguistic interaction that occurs between learners in the classroom. Moreover, it specifically stated that all the data would be handled confidentially and anonymously. The participants gave their consent by signing the document. All participants signed the document and therefore no recording has been used without consent.

4.6. Data Analysis

The research done in this study is of mixed methods. It contains a qualitative analysis in order to identify a series of categories of communication strategies (RQ1) and to compare the use of these strategies, as well as a quantitative analysis to compare the frequency of these CS (RQ2).

To respond to the first RQ the instances of NofM have been conceptualized into the different CS types found in the corpus. The coding of these categories was pre-determined and adopted from Cohen

(2010) demonstrated in Table 1 (see 2.1.1) as well as the categories of CS found by Lee (2001). The following paragraphs will repeat and extend the definitions of the CS found in the present corpus.

Clarification requests. Clarification requests occur when the listener asks for an explanation of an utterance using wh- questions such as “what?”, “which?” (Cohen, 2010; Long, 1980 and Pica & Doughty in Lee, 2001, p. 237).

Appeals for assistance. This CS occurs when the interlocutor turns “to the conversation partner for help either directly (for example, ‘What do you call ...?’) or indirectly (e.g., rising intonation, pause, eye contact, puzzled expression)” (Cohen, 2010, see Table 1).

Confirmation check. Confirmation checks indicate the repetition of either the entire utterance or part of the utterance “heard by the listener to ensure that what s/he has heard is correct” (Long 1980 and Pica & Doughty in Lee, 2001, p. 237). This strategy may also be used as a stalling strategy (Cohen, 2010, see Table 1).

Provision of assistance. As the name suggests this refers to when the listener responds to an appeal for assistance by suggesting words phrases that the speaker might be looking for (Sauro, 2011). Furthermore, this is an enhancement strategy, used to enhance the effectiveness of the communication (Canale, 1983, p. 9).

Self-correction. Self-correction refers to when an interlocutor corrects an uttered word or structure after realizing the erroneous statement (Lee, 2001, p. 237).

Topic shifting². Topic shifting is what Cohen (2010, see Table 1) refers to as message replacement. It is when an interlocutor abandons the current message and replaces it with a new message (topic) when not capable of executing the current one.

Circumlocution. Circumlocution occurs when an interlocutor tries to describe or exemplify a word that they do not know or have forgotten (Cohen, 2010, see Table 1).

Use of Swedish (L1). This strategy is when the speaker uses the L1, in this case Swedish, for words or ideas that the speaker does not know how to express in the L2 (Lee, 2001, p. 237).

Once the conversations had been recorded the investigator identified the episodes containing the CS mentioned above and proceeded to transcribe all the relevant interaction, and this is the material basis for the present study. After the transcription, to answer the RQ (2), the instances where these CS have been used was counted. Unfortunately, because of technical issues with the recordings of SCMC, it was not possible to obtain data from three of the seven dyads. Due to this inability, the number of recorded minutes in FTF communication and SCMC differ. Therefore, the instances of CS were divided by the total amount of turns, in order to get the percentage of how many turns were used for CS to be able to compare the data between the two modes. In the case of overlaps between turns, it had to be deduced if it was a continuation of a turn or if the interlocutor had started a new turn with respect to something said during the overlap. This was revealed through the content of the turn and from that information we determined whether to consider them one or two turns.

In regard to the last RQ (3), several factors were considered. Firstly, the use of CS and the instances of NofM were compared. Secondly, the amount of turns per minute in both modes was calculated, in order to establish which mode promoted the highest amount of interaction. Lastly, the amount of turns

² We chose to use the term “topic shift” as it is clearer than “message replacement” and the term is conventionally used within conversation analysis (see for instance, Wong, J., & Waring, H. Z., 2010).

used for CS was calculated, striving to determine which mode prompted the most interaction used for NofM and CS.

5. Results

This section reports the results obtained from the data analysis, and will be presented following the structure of our research questions. To that end, the results for types of CS will be presented first, thereafter follows a quantitative account of the frequency of the usage of these CS. Finally, the third subsection offers a summary of the amount of interaction that occurred in both communication modes.

5.1. Types of Communication Strategies

In this section, the different types of CS found in both communicative modes will be presented and exemplified. All the occurrences of the CS will not be represented in the examples. However, the examples will demonstrate the most common use of the particular CS type in both modes. The participants who used the CS will be labeled as “Student A” and “Student B” and it should be noted that they do not refer to the same individuals, rather it is merely a manner to clarify when there is more than one speaker per example. Furthermore, some examples may contain more than one CS type, however it has been decided to comment on one CS type at a time for the sake of clarity.

Example 1. Clarification request made in FTF communication.

Student A: and one of them is already close to the stairs down so I think it's useless running up again [inaudible]

Student B: what, är det I didn't get that?

In this example, the students had been discussing the location of the people inside the burning building. The clarification request in this instance occurred after Student A had uttered something that was inaudible on video. The request is done by Student B asking “what?” as well as explicitly expressing that s/he did not understand.

Example 2. Clarification request made in SCMC.

Student A: how many fire trucks do you have?

Student B: what?

During the interaction which this example is taken from the students were discussing the different vehicle aids they had available in their drawing. The clarification request was done in a similar manner as the example above, by Student B asking “what?”, there is however no explicit statement of Student B not understanding.

Example 3. Appeal for assistance in FTF communication.

Student A: **what is it called?** eh ... (silence)

Example 3 demonstrates an appeal for assistance. The word Student A was looking for was “fire extinguisher”. The appeal was done both explicitly by asking what it is called and implicitly through a pause.

Example 4. Appeal for assistance in SCMC.

Student A: or maybe just ehm the the fire trucks having eh **what’s it called?... (silence)** stairs
As in the previous example, even this appeal for assistance was done both explicitly, by asking the listener, and implicitly through a pause, before continuing to answer the appeal on their own.

Example 5. Confirmation check in FTF communication.

Student A: and on the third up

Student B: And on the third?

Example 6. Confirmation check in SCMC.

Student A: eh the one on the way to the roof

Student B: on the way?

In both examples above the students are discussing the whereabouts of the people in the burning building. Student B repeats a part of the utterance said by Student A, in order to confirm that s/he has understood correctly.

Example 7. Provision of assistance in FTF communication.

Student A: but uh, these three people I think will need a uh ... (silence) uh

Student B: a firetruck

Student A: yes exactly a firetruck with eh a water

In the example above we see an indirect appeal for assistance caused by hesitation and a pause, resulting in Student B providing assistance, and Student A agreeing which lead to a mutual understanding between the two interlocutors.

Example 8. Provision of assistance in SCMC.

Student A: and out in the entrance ... entrée?

Student B: front door?

Student A: ah the front door

As with the previous example the provision of assistance comes in the form of an answer to Student A’s appeal for assistance demonstrated through hesitation as well as and rising intonation. Again, the provided answer by Student B is agreed to and mutual understanding has been reached.

Example 9. Self-correction in FTF communication.

Student A: they have fire **exsquish** like fire **extinguishers**

The example above demonstrated a self-correction made to a lexical item that was expressed erroneously.

Example 10. Self-correction in SCMC.

Student A: I think there is one people **there is that is** locked in the door

Differing to the example above this self-correction was made for correcting a grammatical error, specifically substituting “there” with the correct form of “that”.

Example 11. Topic shifting in FTF communication.

Student A: But yeah that fire truck can like drive over to the side of the other one

Student B: Yes.. yeah and he can also.. And we can also va hette det so in my picture its three firemens in the truck

Student A: oh in mine there’s one there and two there

As seen in Table 2 this is one of the two CS unique to FTF communication. The topic shift occurred when Student B was unable to elaborate further on the message of the fire truck driving over to the other side, introduced by Student A. Instead Student B chooses to abandon this message and replace it with a new message concerning how many firemen are present in the truck.

Example 12. Circumlocution in FTF communication.

Student A: no not windows eh eh you know eh like you hold it and you

Student B: hose?

Student A: press a battan button

Student B: with water yeah that’s a hose

Student A: ah yeah hose

The other CS unique to FTF communication was circumlocution. In this episode, Student B is trying to find the word for “fire extinguisher”. The speaker described what you would do with it, so the listener would understand what s/he meant. Although the meaning they agreed upon was “hose” and not “fire extinguisher” the interlocutors succeeded in reaching a mutual understanding.

Example 13. Use of Swedish (L1) in FTF communication.

Student A: Because if it’s burning in eh eh **asså** in the right side of the house

Student A here has used the word “asså” which is a common “all-purpose-word” used in Swedish, used to fill in speech, while searching for the correct lexical item or message (Cohen, 2010, see Table 1).

Example 14. Use of Swedish (L1) in SCMC.

Student A: In our house it's burning in the in the **ventilationen jag vet inte asså så här rören**
[inaudible] **så här ventilationen**

Student B: ah in my house too I don't know the word but ... the whole What's the name.. on
the house there's like kind of Something there the smoke came out

Student A: yeah here too there is like.. a ventilation system

The example above demonstrates a use of the L1 that triggered the interlocutors to negotiate for three turns before reaching a mutual understanding on the word “ventilation system”.

Table 2 demonstrates all the different types of CS found in both FTF communication and SCMC. As has been seen in the examples, there are two types of CS that are unique to FTF communication, *topic shifting* and *circumlocution*. Hence, FTF is the communication mode that provided the widest variety of CS types.

Table 2. Types of CS in both FTF and SCMC

Types of CS in FTF communication	Types of CS in SCMC
Clarification request	Clarification request
Appeals for assistance	Appeals for assistance
Confirmation check	Confirmation check
Provision of assistance	Provision of assistance
Self-correction	Self-correction
Topic shifting	-
Circumlocution	-
Use of Swedish (L1)	Use of Swedish (L1)

5.2. Frequency of Use of Communication Strategies

In the quantitative account the results start with a table that summarizes the occurrence of the communication strategies used by the participants in the two communication modes investigated in the present study. Table 3 below presents the raw frequency of occurrence and the percentage they represent over the total amount of turns in FTF communication and SCMC respectively.

Table 3. Frequency of CS in both FTF and SCMC

Frequency of CS in FTF and SCMC	FTF <i>f</i>	% of total turns	SCMC <i>f</i>	% of total turns
Clarification request	1	0.3	2	1.2
Appeals for assistance	16	5.1	9	5.4
Confirmation check	3	1.0	3	1.8
Provision of assistance	7	2.2	3	1.8
Self-correction	12	3.8	3	1.8
Topic shifting	1	0.3	-	-
Circumlocution	2	0.6	-	-
Use of Swedish (L1)	11	3.5	12	7.2
Total <i>f</i> and % of CS used	53	17.0	32	19.2

As can be seen in the table, two of the CS had a minimal difference in frequency, namely *appeals for assistance* and *provisions of assistance*. However, the appeals for assistance were responded 7 out of 16 instances (see Table 3), thereby amounting to 43,8% of the times assistance was appealed for in FTF. In contrast, 3 out of 9 instances were responded with provision of assistance which amounts to 33,3% of the appeals in SCMC.

The frequency of the remaining categories did differ. On the one hand, *Self-correction* was used more in FTF communication than SCMC. *Topic shifting* and *circumlocution*, as already commented on (see Table 2 & 3), was only used in FTF communication. On the other hand, *clarification requests*, *confirmation checks*, and the *use of the L1* was used more frequently in SCMC.

5.3. Amount of Interaction

Due to technical difficulties mentioned earlier (see 4.5), the same number of recorded minutes was not able to be obtained from both communication modes as can be seen in Table 4 below. However, this was compensated for by calculating the number of turns taken per minute. This analysis found that the interlocutors in SCMC took an average of 9,2 turns per minute, in contrast to the 6,2 turns per minute taken in FTF communication. The data therefore suggests that SCMC provoked more rapid speech than FTF, and therefore more interaction took place during the 7 minutes of recording time per dyad.

Table 4. Amount of interaction summarized in conversational turns

Number of conversational turns	FTF <i>f</i>	SCMC
Nr. of turns per minute	6.2	9.8
Total nr. of turns	312	167
Total nr. of minutes	50.5	17

6. Discussion

In the following section, we will discuss the results presented in the preceding section. The results will be discussed following the order of our research questions.

One of the aims of this study was to examine the types of communication strategies used by Swedish learners of English in both FTF communication and SCMC (RQ1). To this aim, eight kinds of CS were found in the FTF group in contrast to the six kinds found in the SCMC group. The six found in SCMC were the all present in the FTF group: *clarification requests*, *appeals for assistance*, *confirmation checks*, *provision of assistance*, *self-correction* and *use of Swedish*. This means the FTF learners used two communication strategies that were unique to this communication mode, namely, *topic shift* and *circumlocution*. A possible explanation for the fact that FTF communication had a larger variety of CS types is that the number of recorded minutes is higher, which creates a larger corpus and thereby heightens the likeliness of more CS types occurring. All things considered the two communication modes did offer a similar occurrence of communication types as was hypothesized.

The interesting issue in relation to topic shift is that it does not necessarily lead to NofM. To put it another way, what the interlocutor who applied this strategy did was to abandon one topic in preference of speaking about another one, a so-called *avoidance strategy* (Cohen, 2010, see Table 1), which means that there was little negotiation involved (see example 11). This leads to the question whether learning had occurred, because the interaction hypothesis emphasizes precisely NofM as a necessary component for SLA and learning to occur during interaction (Long, 1996, in Doughty & Long, 2003 p. 183). However, it is essential to remember Tarone's statement (1981, in Lee, 2001) that all CS are interactional in function (see 2.1.1.). Consequently, in the instance this CS was used (see example 11) the interlocutors did reach a mutual understanding in the new topic and the communicative breakdown was resolved. Additionally, topic shifting does qualify as a communication strategy that promotes the development of strategic competence, because the strategy itself was employed to avoid a communicative breakdown and succeeded in doing so. This, therefore, suggests that this strategy is a successful way to reach the goal of effective communication in adherence with the guidelines of COLT (Littlewood, 2004; 2013). However, the amount of negotiation involved during topic shifting would need to be further examined, which was not possible during this investigation, seeing as it was employed only once.

One of the instances of circumlocution, on the other hand, resulted in a *language related episode* (LRE) negotiating meaning for five conversational turns before the interlocutors reached mutual comprehension (see example 12). An LRE, or "form-focused episode" (Ellis, Barsturkmen & Loewen, 2001), is defined as "any part of a dialogue in which students talk about the language that they are producing, question their language use, or other- or self-correct" (Swain & Lapkin, 1998, in Gilabert et al. 2009, p. 377). In the understanding that negotiation in the LRE went on for five turns, the use of this CS would arguably mean that L2 development had a longer time to foster (Gilabert et al., 2009, p. 371).

Another interesting aspect to comment on is the difference in how the participants used Swedish (L1) depending on communication mode. The use of the L1 in many cases during SCMC communication led to a multi-turn LRE, where the students, through negotiation, eventually reached mutual understanding in the target language (see example 14). On the other hand, during the FTF conversations, the L1 was mainly used as a strategy to keep the flow going (see example 13), and

consequently, the instances of actual negotiation were lower. Although both usages of the L1 were made for avoiding potential communication breakdowns, following the interaction hypothesis, the usage that leads to the largest amount of negotiation is the most fruitful for SLA. Nevertheless, the *avoidance* usage in the FTF communication also fulfils the goal of effective communication, as was the case with topic shifting.

Regarding the remaining communication strategies, no particular difference could be found in the participants' usage between communicative modes. Self-correction was mainly used to correct an erroneous form; appeals for assistance came in both implicit and explicit manners; confirmation checks were done by means of repeating part of or the entirety of the uttered statement ending with rising intonation; assistance was provided through providing the speaker with the missing word or words; and clarification requests were done by asking "what?".

The second aim of this study was to examine the frequency of use of the CS (RQ2). We will start by discussing the CS that differed minimally between the two modes. Thereafter, we will discuss the results concerning frequency usage of CS where the two communication modes differed the most.

According to the analysis of the different communication strategies employed to negotiate meaning in the present corpus, the most frequent strategy was *appeals for assistance* in FTF, which was the second most frequent CS in SCMC communication. Furthermore, the percentage for this category was virtually the same in the communication modes, as it makes up 5,1% of the turns in FTF and 5,4% in SCMC, that is, a difference of only 0,3%. Therefore, the difference being minimal we propose that the communication mode in this case did not seem to affect the use of this strategy.

A second strategy that differed minimally in frequency was the third most used strategy in SCMC and the fourth most frequent in FTF communication –*provision of assistance*. However, the results became interesting upon calculation of the percentage of how many times these *appeals for assistance* were responded to with *provision of assistance*. In essence, the results suggested that more of the communication breakdowns resulting in appeals for assistance were resolved or attempted resolved with provisions of assistance in the FTF communication mode as opposed to SCMC. Consequently, when an appeal for assistance is responded instead of abandoned, it results in an LRE. Hence the NofM had a longer duration, which again gives L2 development a longer period to foster (Gilbert et al., 2009, p. 371). Moreover, the provision of assistance emphasizes the interactional function of the CS as both speaker and listener are modifying their input to reach joint understanding. By so doing, they are engaging in a higher level of NofM than if the appeal is left unresolved (Tarone, 1981, in Lee 2001, p. 234).

One of the strategies that displayed a higher discrepancy between the two communication modes was *self-correction*. The results indicate that the students interacting in FTF communication exhibited a higher frequency rate of self-correction than the students using SCMC. As seen in the examples (see examples 9 & 10) the great majority of instances that self-correction was employed was to correct faulty forms, not meaning. Therefore, a possible explanation for the lesser use of it in SCMC is the suggestion made by Lee (2001, p. 240), that learners interacting in SCMC are more focused on obtaining the message and meaning of the interaction than on the correct usage of grammar or any other linguistic form. Following this proposal, the lesser usage of self-correction in SCMC would be due to the message and meaning being understood regardless of usage of faulty forms.

Both the usage of *confirmation checks* and *clarification requests* were higher in the SCMC group than in the FTF group. Based on the examples presented in the previous section (see 5.2), it is feasible that a possible explanation, which also reinforces the same finding as mentioned in the previous paragraph,

is that the students interacting through SCMC are more inclined to negotiating the meaning and understanding the meaning rather than the form of an utterance and are therefore more prone to request clarification and confirmation to make the speaker to elaborate the idea further and be sure they have understood correctly (Lee, 2001, p. 242).

The CS that showed the largest difference in frequency between the two communicative modes was the use of the L1 Swedish. The usage was higher in SCMC than in FTF communication, which is a finding contrary to the hypothesis posed concerning this RQ as well as Heins et al. (2007), who found the opposite. There may be several possible explanations for this. Firstly, one must consider if problems in hearing the interlocutor speak prompts the students to switch to their L1, as they may regard themselves “off-task”. Secondly, because the research design of the present study did not include a standardized test to measure the proficiency level of the participants in English, there may have been participants in the study that were weaker students who lack the knowledge to convey their meanings in the target language. Notwithstanding, the results of the present study lend support to the study in Lee (2001), and point in the same direction discussed above. The students of SCMC being more interested in conveying the message in any way possible, than in the correct form of the target language.

Lastly, as mentioned above *topic shift* and *circumlocution* only occurred in FTF communication. However, both CS had a very scarce frequency rate of only one and two instances, respectively. This is so despite the higher number of minutes that were recorded in FTF. Therefore, these cannot be characterized as a commonly used CS, based on the results of the data in the present study.

The third aim of this study was to examine which of the communication modes created an environment more favorable for NofM (RQ3). This will be discussed considering the use of CS as well as the amount of interaction produced in both modes. As most of the CS were used in the same manner, the most interesting CS to discuss are the ones that had different usages depending on mode: topic shift, circumlocution and the use of L1.

As noted earlier, due to topic shift being an avoidance strategy (Cohen, 2010), it did not in this case result in negotiation of meaning. Therefore, the fact that this strategy was unique to FTF communication, did not however prove favorable to promoting NofM. On the other hand, circumlocution did result in prolonged LREs where the interlocutors negotiated for meaning over several turns. This CS therefore gives FTF communication an advantage. It must however be noted that there were only two occurrences in the corpus.

Another CS speaking in favor of FTF communication was provisions of assistance. The results showed that the participants in FTF communication provided assistance in more cases of appeals for assistance than the participants of SCMC. This therefore lead to a higher occurrence of NofM.

The different uses of the L1, on the other hand, would arguably speak in favor of SCMC. This because, as noted above, the students in SCMC engaged in prolonged LREs negotiating for meaning, before reaching a consensus in the target language. Additionally, in contrast to circumlocution, this CS was the most frequent in SCMC with a representation of 7,2%.

When it comes to the amount of interaction, there are several factors to consider. Firstly, the total amount of turns is not comparable, seeing as the recorded minutes differ between the communicative modes. Therefore, an average of number of turns per minute was calculated. Here the results showed that SCMC was the mode promoting the highest amount of turns per minute. This is something supported by Lee (2001, p. 240) and Sotillo (2000), who state that the students in their investigations

“strove to respond to the input quickly, so that they could follow the flow” and that the students therefore were more interested in exchanging ideas, i.e. meaning, than in correcting every linguistic error. This is something that is corroborated by the fact that there was a higher percentage of self-correction (focusing on form not meaning) in FTF than in SCMC. Secondly, if we look at the percentage of all the CS employed according to the total amount of turns, SCMC again prevails as the communicative mode with the highest amount of turns used for communication strategies.

7. Conclusion

In this study three research questions were formulated with the purpose of investigating the development of strategic competence through NofM and the use of CS in two communicative modes: SCMC and FTF communication. In regard to our first RQ, which enquired the types of CS used, eight different CS were identified in the corpus. In particular, those CS were primarily *clarification requests*, *appeals for assistance*, *confirmation checks*, *provision of assistance*, *self-correction*, *use of Swedish*, *topic shift* and *circumlocution*. The first six were common in both communication modes whereas last two were unique for FTF communication. This suggests that there was a higher variety of CS in FTF communication, albeit the usage of both topic shift and circumlocution was very scarce and were consequently not considered common CS in the data. The usage of these CS was for the most part similar in both modes, except for the usage of the L1 Swedish. The results seemed to indicate that in FTF communication the L1 was used to keep the flow going and NofM was therefore rare, whereas in SCMC it resulted multi-turn LREs negotiating meaning and successfully reaching an agreement in the target language, thereby facilitating SLA.

Concerning our second RQ the frequency of usage of the aforementioned CS, the results suggest that this frequency differed between the two communicative modes besides *appeals for assistance* and *provisions of assistance*. In turn, self-correction, topic shift and circumlocution had a higher frequency in FTF communication, whereas clarification requests, confirmation checks and usage of Swedish had a higher occurrence rate in SCMC.

Our third RQ concerned which mode was more favorable for NofM to occur. On the one hand, the results in favor of FTF communication were reflected in the higher response rate of appeals for assistance and the use of circumlocution. On the other hand, the results supporting SCMC were seen in the higher frequency and especially in the use of the L1, in the lesser occurrence of self-correction of faulty forms, as well as the higher number of turns per minute and higher percentage of turns used for CS. Based on these results, the present study would seem to point at SCMC as the most favorable communication mode for NofM, something that contradicts our hypothesis and makes it even more pertinent that more research is needed into the oral SCMC.

In spite of the conclusions just drawn, the study conducted here also had some limitations. Firstly, we were unable to obtain an equal amount of data from both communication modes, because fewer participants were able to participate in the SCMC data collection session. Although the size of the data collected was large enough so as to permit a suitable codification of the data using the categories of analysis under investigation here and to compare the data from both modes in an effective manner, there is no way to be sure to what extent this discrepancy in the size of the data from this group could have influenced the results. Secondly, the physical inabilities to get hold of sufficient separate rooms

for the SCMC group resulted in a dissimilarity in the procedure of data collection between the two modes as well, also leading to a few minor differences in the procedure employed during the data collection.

The results of this study are promising but as the scope was small (22 participants) these results cannot be generalized and further research is needed. Firstly, the research done on oral SCMC is still scarce, and we would therefore suggest that further studies are necessary to determine the potential benefits that it may have for language teaching and learning. This is especially pertinent considering the rapid growth of digital tools and their implementation in the classroom. Secondly, future investigation should employ research designs that involve pre-testing and post-testing in order to be better able to establish a link between the usage of SCMC in a communicative classroom and second language teaching and learning, as well as establishing principles for pedagogy entailing SCMC. However, if these findings are further corroborated it would be of huge benefit to implement more oral tasks through SCMC in the second language classroom. As mentioned, SCMC has the advantage of being free to use outside the classroom as well, making way for a variety of possibilities for flipped classroom exercises, the possibility for students to record a conversation on skype for assessment and the possibility for interaction with native speakers for example through a collaboration between schools.

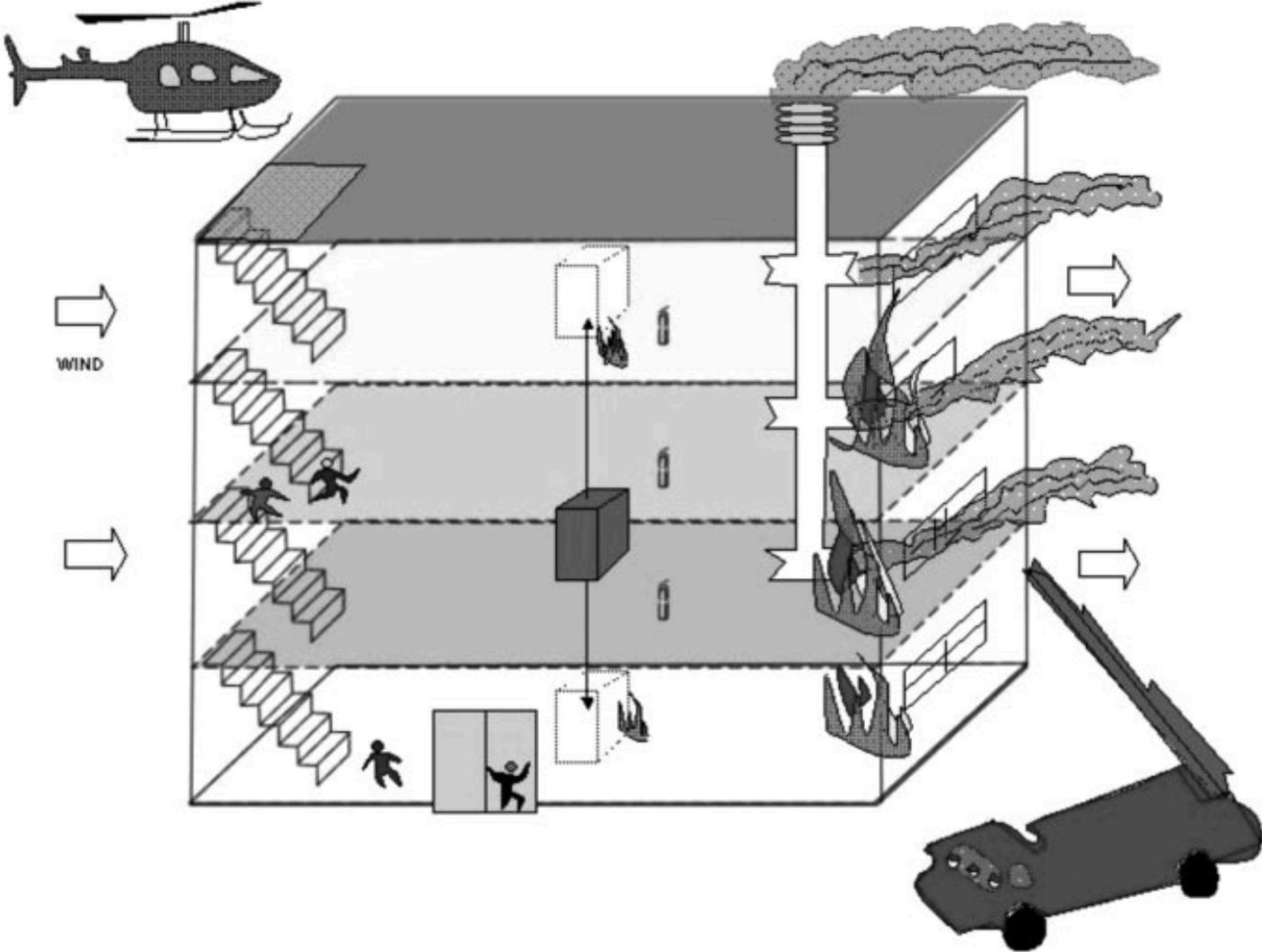
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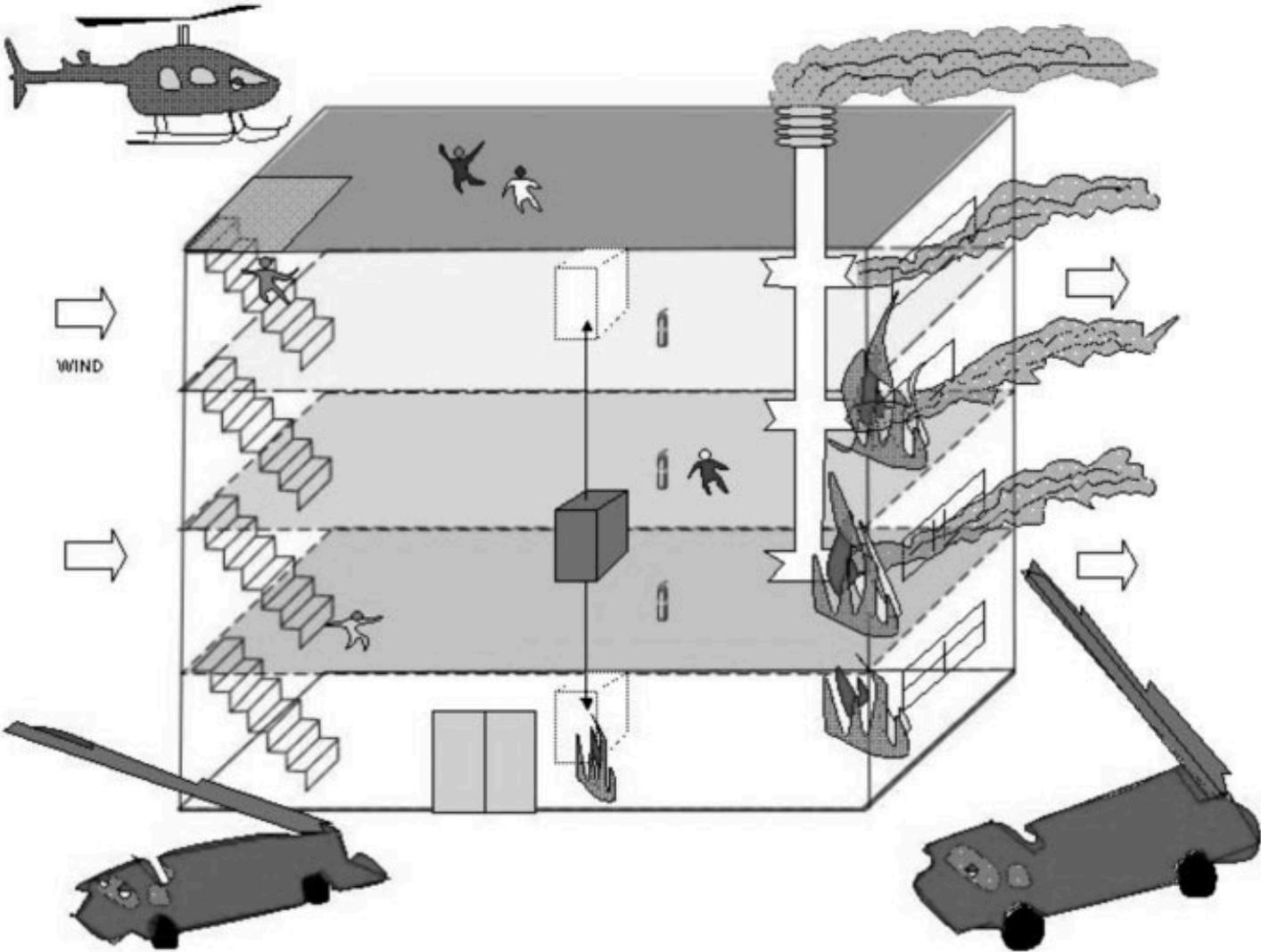
9. Appendix 1- The Fire Chief³

STUDENT A



³ Adopted from Gilabert, Barón & Llanes (2009, p. 391).

STUDENT B



10. Appendix 2 – Consent Form

To whom it may concern:

My name is Karianne Scheie and I am writing a degree project about English learning in Sweden as part of my education as a language teacher at Stockholms Universitet. The aim of my study is to investigate the linguistic interaction that occurs between learners in the classroom. The data collected will be handled confidentially and anonymously.

I hereby confirm that I have received information about the aim of the research project on the school subject of English. I consent to take part in this project.

Student's Name and signature:

Stockholm University
SE-106 91 Stockholm
Telephone: +46(0)8 – 16 20 00
www.su.se

