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Leila Kääntä

Teacher Turn-Allocation and Repair Practices in Classroom Interaction

A Multisemiotic Perspective

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ABSTRACT

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This study describes teacher turn-allocation and repair practices in classroom interaction. The primary aim is to investigate what kinds of embodied actions and other semiotic resources teachers draw on when allocating turns to next speakers and when projecting repair actions in activities structured according to the tripartite instructional sequence of Initiation-Response-Evaluation. The study combines the theoretical and methodological framework of Conversation Analysis and a Goodwinian view of interaction as dynamically and reflexively created through a myriad of semiotic resources. The data base consists of 24 video-recorded lessons, from which 376 turn-allocations and 34 repair sequences have been identified for analysis.

The findings show that teachers typically allocate turns to students by using the selected student's name and by directing their gaze towards the student. However, teachers also employ head nods and pointing gestures either together with the student's name, with different types of discourse particles, or on their own. The last construct functions as an *embodied allocation* and derives its interactional meaning through its sequential position. However, embodied allocations are successful only when the participants establish mutual gaze. In contrast, in address term turn-allocations only teachers' gaze towards the class is essential; students' gaze towards teachers is not. The embodied allocations are used in different sequential positions. When they are produced in overlap with initiations or evaluations, the two interactional tasks, the initiation/evaluation and the turn-allocation, constitute distinct *turns-of-action*.

The repair analysis reveals that teachers use a variety of semiotic resources in multifaceted ways in projecting dispreferred next actions: the initiation or enactment of repair. The particular resource employed depends on the overall activity framework and the types of evaluative actions teachers need to perform. Such resources include withholding the revealing of correct answers, cut-off body movements, motionless gaze and body orientation, or diverging gaze trajectories and body movements towards teaching materials or class. Interestingly, some of these *embodied projection devices* are produced in overlap with student response turns, thus manifesting the teacher's orientation to the forthcoming evaluation, and its potential production already at that point.

Keywords: classroom interaction, conversation analysis, multisemiotic resources, embodied actions, turn-allocation, repair, IRE sequence

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FOREWORD

> ”Doing research is like trudging through a gigantic marsh, where, ignorant of the terrain, one is always on the verge of sinking in, unless there are others, more experienced, to guide and to keep you on the right, hopefully solid path.”

I once wrote a slightly modified version of the above metaphor in a postgraduate seminar organized in our department. At the time, we were asked to think how we felt about our research and to finish several sentences that started with the words: *My research is*…, *My method is*… and *My research process is*…. I remember that the metaphor of a marsh, and me trudging through one, came quickly into my mind, because that was what doing research really felt like for me. Finding solid ground beneath your step through trial and error is very much like the researcher's search for the best methodological framework to use as well as her exploration of the most interesting and up-to-date empirical phenomena to study. Mind you, I do not recall ever having really had to plough through a real marsh.

Nevertheless, the effort to find a solid path has taken me several years. It has encompassed many bog holes and other obstacles, but in equal amounts, also moments of success and great triumphs. It has also included a great number of people whose support and guidance have both kept me – most of the time anyway – away from the morass of despair and kept my feet on the ground so that I have not begun to think too highly of myself. In short, I owe a huge debt of gratitude to so many people that I can only hope I remember to do justice to all.

First and foremost, I want to thank my supervisors, Arja Piirainen-Marsh and Liisa Tainio, for your continuous support, guidance and encouragement throughout my postgraduate studies and for believing in me and my work when I felt I was losing my faith in it. You have taught me a great deal about how to do research and what it takes to become a scholar. You have provided me with the essential tools for doing research while at the same time you have given me space to find and do things my own way. Above everything, I want to thank you for having endured all my whims and needs, as at times you were not given that much time to read and comment on my drafts, and for having put up with my occasional spurts of insecurity and self-doubt. I would not have been able to do this without you. You two are simply the best.

My study has also greatly benefited from my co-operation with Niina Lilja and Heidi Koskela. I am indebted to you both for all the insightful and detailed comments that you have made in our datasessions and for our talk about doing research in general. Along with those of my supervisors, your contributions have had lasting effects not only on my analysis but how I have grown to view

my data and to understand the various phenomena studied in the field of conversation analysis.

I am also grateful to the Jyväskylä team of Varieng: Sirpa Leppänen, Tarja Nikula, Anne Pitkänen-Huhta, Päivi Pahta, Samu Kytölä, Marianne Toriseva, Terhi Paakkinen, Tiina Virkkula, Henna Jousmäki, Saija Peuronen, Alicia Jinkerson, Elina Westinen and Ari Häkkinen. You have all made sure that work has not become too burdensome by creating an inspiring and challenging working environment, in which we all collaborate and learn together. What is more, we have fun in doing so. All in all, Varieng has been an excellent place to be and grow as a scholar, as we postgraduate students have been trusted with challenging tasks and various responsibilities and have been made to feel that we are equals, colleagues, whose thoughts and views are respected and listened to. A special thanks to the "seniors" for giving me invaluable opportunities to educate myself with other scholarly tasks than writing the dissertation. I would also like to thank Ari for giving me editorial assistance in finalizing the work. For myself, I apologize for all the mood swings and endless fits of perfectionism and impatience, and erratic insistence on orderliness and systematicity that I have put you all through. No doubt the same will continue as I am unlikely to change in the near future: So try to bear with me! To all of you, I want to say: "Thank you for being the Hupsut you have always been from day one. Don't ever change!"

To have been able to do my research in the first place has been made possible by the two affiliations that have provided me with financial support: the Department of Languages in the University of Jyväskylä and Langnet. The department has offered me the physical surroundings and other material means to do my research. From the very beginning of my postgraduate studies, from being a graduate student to becoming a full-time staff member, I have been made feel at home and as one of you. Thank you for this. (I honestly can't believe that I have walked in these corridors and sat in these rooms for thirteen years already!) I would also like to express my appreciation to the people who have participated in the English postgraduate seminars and in the various postgraduate events organized in the department: the general discussions on how to do PhD research as well as your comments and critical feedback on my work have guided me to find my own path.

The Graduate School in Language studies, Langnet, has given me the opportunity to work on my dissertation full-time and to be part of a national graduate school. I thank you for your trust in me and my research: I only hope to have measured up to the various expectations that membership of Langnet sets for its graduate students. I can only say that I have learned a great deal about research and about being a scholar in Langnet, both in individual courses and within the Language-in-use sub-program, to which I belong. Over the years, quite a few people have read drafts of my work and commented on them in our seminars. There are so many of you that instead of listing you separately, I just want to extend my gratitude to all of you for all your helpful comments and thought-provoking questions and conversations: you really have not let me off easy. But it has been worth it, as it has caused me to reflect hard upon my

research. The effects of your input are visible here and there throughout the study. I just hope that you will be able to recognize your individual contributions to this work (but if you don't, then just ask me and I'll try to tell you).

I also like to express my appreciation to the external reviewers, Fritjoff Sahlström and Paul Seedhouse, for your constructive and detailed comments. I only hope that I have been able to do justice to them in doing the revisions. In truth, I feel that I have been treated with great kindness: I expected you to be much more critical, but perhaps that's just me. I would also like to thank Michael Freeman for doing an incredibly thorough job checking the language on such short notice and with such a tight schedule.

A huge hug to Piia, Hanna, Helena, Riikka, Sanna and April, and the others in the 'coffee room gang', for all the 'extra-curricular' activities we've enjoyed over the years. It is those precious moments of relaxation that have maintained the somewhat narrow balance between work and leisure, and my sanity. Of yours I am not so sure, after all you have had to listen to my complaints about my work quite a lot. I hope I haven't made you too fed up with it or, more precisely, with me.

Halaukset ja kiitokset myös vanhemmilleni, siskoilleni Lissulle ja Merijalle sekä Mirvalle ja Ollille ja muille ystävilleni kaikesta tuesta, kuuntelemisesta, kestämisestä ja avusta näiden väitöskirjavuosien aikana. Omistan tämän väitöskirjan mummulleni.

Jyväskylässä, talvisena helmikuuna 2010

Leila

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1 INTRODUCTION

The classroom is the primordial and institutionalized site of formal education. Classroom interaction is accordingly the organizational apparatus through which the teaching and learning of languages and academic subjects are co-constructed, managed and accomplished by teachers and students alike. In the accomplishment of this institutional task, teachers and students perform a variety of different types of actions; these constitute the building blocks for the different types of classroom tasks and activities that take place during lessons. Among these actions are two of the fundamental interactional and pedagogical tasks through which teachers do an essential part of their work: the distribution of turns to next speakers and the evaluation of student responses.

The present study focuses on describing how teachers shape and perform their next speaker nominations and their evaluations, when these address students' erroneous or somehow inappropriate responses vis-à-vis the pedagogical focus of each ongoing activity (Seedhouse 2004). These *teacher turn-allocation* and *repair practices* are seen as 'situated activities' (M. H. Goodwin 1990, 1995) within the broader interactional and sequential organization of classroom activities. Their shape is essentially explored in classroom activities that are built through the teacher-led, instructional sequence of IRE (Initiation-Response-Evaluation, Mehan 1979), and the description is centred on their *multisemiotic* construction with an emphasis on embodiment. That is, the interest is in how teachers employ not only talk in their meaning-making practices but also different types of embodied actions, such as the use of gaze, gestures, body posture and movement, and pedagogical artefacts, such as teaching materials and instruments.

The study explores the multifaceted and multilayered nature of teacher turn-allocation and repair practices within their sequential context of occurrence by drawing on the methodological framework of ethnomethodological conversation analysis (henceforth CA). Within CA, all human interactions are seen as constructed through the locally produced actions that make up the larger activities of people's everyday lives (Heritage 1984; Psathas 1995). In this, the participants' own understanding of what is

taking place and their display of that understanding through their sequentially organized actions is crucial. The participants both design and interpret the meaning of their actions through a myriad of interactional resources. These range from language, facial and gestural expressions, body postures and movement through the spatial organization of the setting and the materials and instruments used in it to its overall physical environment. Interactants employ these multiple *semiotic resources* dynamically in that, as the interaction unfolds sequentially and temporally, they make them relevant and publicly visible to each other as meaning-making resources (Goodwin 2000a).

To describe the actions teachers, and students, perform in the educational context of classrooms from a CA perspective entails that the participants' actions are examined with respect to how they are organized through the interaction and how they are constructed to meet the goals of the setting: the pedagogical and institutional task of teaching and learning (Schegloff et al. 2002). By adopting a multisemiotic perspective on describing teacher turn-allocation and repair actions, I hope that both a deeper understanding and a more holistic view of the interactional practices embedded within and manifested through classroom interaction as a formal site of pedagogical work will be achieved.

The classroom settings in which teacher turn-taking and repair practices are examined are English-as-foreign-language (EFL) lessons and biology and physics lessons where English is the medium of instruction (CLIL). The EFL and CLIL classrooms can be characterized as formal institutional environments in which the participants' primary means of verbal communication is their second language: English. Finnish is also used in both settings, but to a lesser degree. The EFL and CLIL classrooms have been chosen as the two settings from which the data for the present study are drawn because they represent two distinct types of formal language learning environments. Whereas in EFL lessons English is the primary target of learning, in CLIL lessons the primary target of learning is the subject matter and English as a goal of learning is only secondary (Järvinen et al. 1999; Nikula & Marsh 1997). However, instead of focusing on how the learning of language or of content takes place in the settings, this study aims at empirically describing the broader interactional, i.e. both institutional and pedagogical, practices through which instructional interaction, and hence learning opportunities, is enabled and constructed.

1.1 Aims

A large number of classroom interaction studies can be characterized by their focus on examining the role of the three-part IRE sequence of teacher-fronted instruction and activities (see e.g. Hall & Walsh 2002; Lee 2007; Nikula 2007b). CA studies on classroom interaction that have investigated the use of the IRE have revealed its dynamic nature insofar as it is deployed by teachers to guide,

invoke and constrain students' participation in interaction (e.g. Lerner 1995; Sahlström 1999; Hellermann 2003, 2005; Margutti 2004) and, vice versa, by students to resist, reshape and renegotiate their participation (e.g. Candela 1998; McCafferty 2002; Thornborrow 2002; Lehtimaja 2007). More importantly, in a great number of these and other studies the primary focus has been on examining the talk of the participants, their utterances, and how language is used in the enactment of different interactional practices (e.g. McHoul 1978, 1990; van Lier 1994; Seedhouse 2004; Macbeth 2004; also Mehan 1979; although see Hellermann 2003). However, quite a lot of the practices performed by teachers and students are designed through the use of a variety of other resources, such as embodied actions, the spatial organization of the classroom, and the material and physical environment (see also Tainio 2007: 31). This becomes evident when one is, for instance, reading through transcripts of spoken classroom interaction: one cannot but notice that the transcribed talk does not portray or explain all that is going on (a similar observation was made by McHoul already in 1978). This observation is attested by a steadily growing body of classroom interaction research that addresses the participants' embodied actions and their role not only in the construction of participants' overall actions but also in how teaching and learning are accomplished through the interaction (see e.g. Ford 1999; Sahlström 1999; McCafferty 2002; Lazaraton 2004; Olsher 2003, 2005; Cekaite 2006, 2009; Mortensen 2009).[1] My study contributes to this research by describing the role and the design of the different semiotic resources used in addition to talk by teachers in their interactional practices. It also sheds light on how the use of these resources influences the overall interactional and sequential organization of classroom activities.

Moreover, although a great deal of classroom interaction is mediated by different types of teaching materials and instruments, research on how the participants construct and structure their interaction while also orienting towards mediating artefacts is scarce (although see Ford 1999; Olsher 2003, 2005). The present study provides insights into the ways in which the participants create the complex and multifaceted nature of the instructional interaction within the IRE sequence by drawing on and employing different pedagogical artefacts and the spatial configuration of the classrooms.

The primary aim of the study is then to reveal the range of semiotic resources teachers draw on when constructing their turn-allocations and repair actions. Additionally, it describes how teachers construct their turns-of-action in and through the sequential organization of classroom interaction. It also shows how teachers project their forthcoming evaluative and repair actions. More specifically, the three empirical research questions are: 1) How do teachers construct their turn-allocations and repair actions and what kinds of multisemiotic resources do they employ in generating meanings in EFL and CLIL settings? 2) How are teachers' turn-allocations and repairs fitted into each

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1 For recent reviews on nonverbal behaviour research on L2 classrooms and L2 acquisition from other methodological and theoretical perspectives, see Stam & McCafferty (2008) and Quinlisk (2008).

interactional context and to the emerging participation framework(s) and how are these frameworks shaped by the teachers' actions? 3) What does a multisemiotic perspective on classroom interaction reveal about the sequential organization of instructional interaction?

The analysis will show that teachers and students draw on and use in an intertwining and overlapping fashion divergent verbal and embodied resources to negotiate and achieve the pedagogical goals set for each activity and each lesson. It will also demonstrate that classroom interaction comprises various types of complex and overlapping actions, which the participants need constantly to observe and to orient to as the interaction unfolds. The simultaneity and contingency of the participants' actions are due to the exigencies of the institutional setting and its material, spatial and participant configurations. Pedagogical artefacts also contribute to the variation in the interactional resources used to construct the distinct interactional tasks that take place in and through classroom interaction.

1.2 Theoretical and methodological framework

The principal theoretical and methodological framework of the present study is *ethnomethodological conversation analysis* (CA) intertwined with a Goodwinian (2000a, 2003) approach to social interaction as a dynamically and reflexively constituted, situated activity. CA has been selected as the main method as it enables the researcher to observe how the social interactants themselves construct and interpret their actions. A participant-perspective, an emic approach, into observing and describing interaction is thus advocated within CA. More importantly, it enables the description of talk-in-interaction moment-by-moment as each action unfolds in an orderly fashion sequentially and temporally. Consequently, CA is the most appropriate method to analyse and describe interaction through its micro-constituents, even down to the minuscule embodied actions that are employed in the construction and negotiation as well as interpretation of meaning in social interaction. Therefore, most of the studies drawn upon in this study come from different areas of CA-related work.

The theoretical framework also includes research conducted in the fields of *second language acquisition* (henceforth SLA) and *CLIL education*, as EFL and CLIL classrooms are the two classroom settings in focus. Within these fields the area from which the present study draws upon is interactionally oriented second language learning research that has been studied by means of conversation analysis.

In this section, I will briefly contextualize the present study within the above fields and introduce some of the most important terms. At the end of the section, I will bring the two classroom settings together and propose a rationale through which situated, locally constructed classroom interaction can be examined with CA. The purpose of this short overview of the theoretical

context of the present study and where it falls within the larger framework of (multimodal) interaction research, and particularly, within the field of classroom interaction studies, is to equip the reader with the knowledge needed to follow the empirical analysis. The theoretical and empirical basis will be further elaborated in chapters 2 and 3.

1.2.1 Ethnomethodological conversation analysis and embodiment in talk-in-interaction

Ethnomethodological conversation analysis is a theoretical and methodological approach that focuses on the study of interaction by describing people's social actions as part of the mundane, social activities people perform and accomplish in their everyday lives (Heritage 1984; Psathas 1995). It investigates how individual social actions are performed in an orderly way to build larger activities that are sequentially structured through the participants' interactionally collaborated achievement (e.g. Goodwin & Goodwin 1992; Heritage 1984; Drew 2005; Schegloff 2007). In other words, the orderliness and structural organization of naturally occurring interaction from the viewpoint of how social actors themselves manage to reach a shared understanding of the interaction at hand is at the heart of CA. The basic starting point is thus *social action* and its interactional function within a sequence of other actions: how it is contingently built on prior actions and what kinds of expectations it sets for those to come (e.g. Heritage 1984; Schegloff 1990; Psathas 1995; Arminen 2005; Drew 2005). Through the investigation of social actions, CA focuses on examining and describing the interactional practices participants draw on in achieving collaboratively created interaction in different types of settings and for divergent purposes via the establishment and negotiation of intersubjectivity; the participants' shared understanding of what is taking place within a particular activity (Heritage 1984: 254–260; Schegloff 1992).[2]

An essential part of sense-making in interaction is the way in which social actions are contextualized to perform particular interactional tasks within the larger framework of social activities. Hence, from its inception, the fundamental understanding of CA has been that people construct their social actions by employing a number of meaning-making resources. What this entails is that CA not only considers talk, or language and how it is contextualized, as the primary interactional means through which interactants make sense of each others' actions, but also the design and intelligibility of turns-at-talk as these rely on a variety of other interactional resources (e.g. Psathas 1995: 48; Goodwin & Duranti 1992; Goodwin & Goodwin 1992; M. H. Goodwin 1990). These resources include, among others, the sequential placement of the utterance in the larger activity framework and the various nonverbal actions performed by the participants. Other important resources relate to the different dimensions of

[2] The historical developments and origins of CA as well as its basic tenets and fundamental underpinnings have been reported at length elsewhere (e.g. Heritage 1984; Psathas 1995; Hutchby & Wooffit 1998; ten Have 1999; Drew 2005; Wooffit 2005).

the larger context (Goodwin & Duranti 1992). These consist of the wider contextual setting of the interaction, i.e. the physical environment, in which the interaction takes place and the participant configuration of that setting, i.e. who is present and what kind of social relationships they reflexively negotiate with each other (Goodwin & Duranti 1992: 6–9). The participation framework, i.e. the interactional roles participants construct and reshape for one another as the interaction unfolds, is therefore one of the sense-making resources employed in interaction (Goodwin & Goodwin 2004; Seppänen 1997; see also Goffman 1981).

Among the different sense-making resources are the various nonverbal behaviours people produce. Nowadays, the study of nonverbal behaviour is more generally referred to as the study of embodied actions, or embodiment. The term refers to the different actions people perform with their bodies, such as the use of gaze, head and arm gestures, body movement and position, and so forth (see Haddington 2005: 88; Olsher 2005: 223).[3] While the first generation of CA studies has essentially focused on studying talk-in-interaction, i.e. how talk is used to create meanings as part of interaction (see Lerner 2004), some studies have also described how distinct embodied means are used in sense-making (e.g. Goodwin 1981; Schegloff 1984; Heath 1984, 1992; Streeck & Hartge 1992; Streeck 1995, 2009). The study of embodiment-in-interaction has slowly gained more and more attention as the areas of interest of CA research have broadened from everyday interaction to various institutional and technological surroundings in which the work of the setting, and thus the meanings constructed in it, is carried out through the use of a variety of material artefacts and people's orientation to these artefacts in and through their interaction. Regardless of the fact that growing interest has been shown in the study of embodiment there is as yet no systematic framework for describing how the use of embodied actions figures in and manifests the sequential organization of interaction, as pointed out by Schegloff (2007: 11).

One of the pioneers in the study of embodiment has been Charles Goodwin (1981, 1986, 2000a, b, 2003).[4] His work has not only focused on the role the participants' bodily conduct plays in meaning-making, but it has broadened the analytical perspective from the use of embodied actions to include the social, cultural, and material environment that explicitly sets these in relation to the temporal emergence of sequentially structured interaction. Goodwin (2000a, 2003) argues that the accomplishment of situated, social actions is carried out through a variety of semiotic resources to which the participants orient as relevant in their surroundings for the moment-by-

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3 I believe that the term has been adopted for CA-based research that studies how interactants employ the embodied resources intersubjectively, thus differentiating it from the more psychologically oriented research on nonverbal behaviour, where the study of the meaning of individual utterances is of primary interest (see e.g. McNeill 2000; Kendon 2004).

4 Other embodiment researchers, who have argued for an interactional approach to examining the role of bodily conduct and material artefacts in situated activities include among others Heath (1984, 1992), Hindmarsh & Heath (2000), Heath & Hindmarsh (2002), and Streeck (1993, 1994, 1995, 2009). Their research will be presented in chapter 2.

moment, incremental construction and deciphering of meanings. Semiotic resources, aside from talk, refers to the already mentioned gestural and postural operations and use of gaze, and to artefacts, materials, and the physical environment. Goodwin argues that by examining the emerging and shifting *contextual configurations* of people's situated actions as they are reflexively built through the interplay of semiotic resources enables the examination of distinctively diverse phenomena "as integrated components of a common process for the social production of meaning and action" (2000a: 1490). The same interaction-oriented, dynamically situated perspective on describing teacher turn-allocation and repair practices in and through classroom interaction, and how teachers draw on the multisemiotic features of their surroundings to design and accomplish these institutionally and pedagogically relevant actions is adopted in the present study. In addition, precisely because it focuses on the institutional interaction of classrooms, this study falls within the field of institutional CA.

Institutional CA

Although the focus of CA was at first, after its introduction, heavily on ordinary conversation, it soon came to be used in the exploration of other forms of talk as well, such as institutional interaction.[5] Heritage (2005) makes a distinction between basic CA and institutional CA. In its basic form, CA is fundamentally interested in the "social institution *of* interaction as an entity in its own right" (Heritage 1997: 162, emphasis in the original). Basic CA thus concentrates on discovering the all-encompassing, fundamental structures of talk-in-interaction of everyday encounters. The study of institutional talk, in contrast, involves the investigation of "the management of social institutions *in* interaction" (Heritage 1997: 162, emphasis in the original). The study of institutional talk then examines how participants invoke the institution into being through their interaction (Drew & Heritage 1992; Drew & Sorjonen 1997; Heritage 1997, 2005; Raevaara et al. 2001). For me, the two distinct lines of investigation share the fundamental empirical question of how interactants create in collaboration social action and how they exhibit to one another their understanding of it. The question that is at the core of CA, and also my work, is "Why is this action produced at this point in that manner?" (e.g. Schegloff et al. 2002; Seedhouse 2004: 16).

When institutional interaction is studied, ordinary conversation is generally taken as the point of comparison. The institutional varieties of talk are considered to be to an extent more restricted and constraining, and more systematized and particularized in terms of the interactional practices the participants can employ when compared to everyday interaction (Heritage 1984: 239–240, 1997, 2005; Drew & Heritage 1992; Hutchby & Wooffit 1998: 148; Raevaara et al. 2001; Arminen 2005). There are three features, according to

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5 I am here overlooking the fact that Sacks' original (as well as Schegloff's) data was institutional, as he himself did not analyze it as an example of institutional talk, but as a form of social action (ten Have 1999: 7).

Drew and Heritage (1992: 21–22; see also Heritage 1997, 2005), that render institutional interaction different, but not necessarily distinct, from ordinary conversation. The first feature is that the core goal or task of the setting is at the centre of the participants' talk so that it is designed to meet the conventional, institutional goals of the setting. The second feature is related to the participants' unequal opportunities to make contributions in the setting that further influence what a given participant can do in the enactment of an institutional task. The third feature is that the participants' inferential procedures are guided by the institutional context and its task. For instance, news interviewers are expected to build a neutral stance towards the interviewee's responses through different sorts of questioning formats (e.g. Heritage & Greatbatch 1991).

The study of institutional interaction aims to make explicit the ways in which the participants themselves bring the institutional context into being through their interaction (e.g. Drew & Heritage 1992; Heritage 1997, 2005; Drew & Sorjonen 1997; Raevaara et al. 2001), and make it publicly visible to one another (Hutchby and Wooffit 1998: 148). The particular view of CA on context – i.e. it is both context-shaped and context-shaping (Heritage 1984) – and how it is seen to be created via the sequential unfolding of interaction is crucial in understanding and describing the institutionality of interaction. It is not only the institution that is being invoked by the participants' actions, but also their respective participant roles, teachers and students in this case, that are established and negotiated via the action-by-action development of interaction. Work on institutional interaction has suggested that there are six features through which the institutional nature of interaction can be traced (Heritage 1997, 2005; see also Drew & Heritage 1992). These are i) the overall structural organization of the interaction, ii) the sequential organization of the interaction, iii) turn-taking, iv) turn design, v) lexical choices made, and vi) the epistemological asymmetry that commonly exists between the participants of the setting.

In the case of classroom interaction, the differences from ordinary conversations have been shown to relate to the ways in which the interaction in lessons is organized as well as how individual actions are sequentially organized to form the particular three-part instructional activity sequence of IRE (Mehan 1979) or larger activity segments (Hellermann 2005). The organization of turn-taking is also different as the teacher is the one who generally allocates turns to students (e.g. McHoul 1978). The shape of turns and the lexical choices made in constructing turns are also particularly designed to, and so manifest, the institutional setting. For instance, teachers employ such forms as *let's* or *we* to indicate that both the teacher's and students' joint actions are invoked (e.g. Kääntä 2004). The last differentiating feature is the asymmetrical, epistemological standing of the teacher and the students: teachers possess knowledge which students not necessarily have.

The present study seeks to illuminate the multisemiotic resources teachers, and students, employ in constructing their turn-taking and repair actions and how their (inter)actions serve in the accomplishment of the institutional task of

the setting. Hence, the analysis touches on the first five of the distinctive features of institutional interaction listed above, and sheds light on how they are oriented to by the participants. In the course of the analysis, a more holistic understanding is progressively built of what classroom interaction as an institutional variety looks like when viewed from a multisemiotic perspective.

1.2.2 The social-interactional perspective on language learning

The present study can be situated within the social-interactional approach to language learning. This despite the fact that the study does not focus on describing how learning takes place; instead it examines how learning opportunities are enabled by demonstrating how instructional interaction is sequentially constructed. Notwithstanding, learning is an intrinsic part of classroom interaction, and therefore examination of the participants' interactional practices is crucial in understanding the extent to which they play a role in socially shared cognition and in learning. In the following, I will offer a brief explanation what the social-interactional perspective on learning is like and what types of studies have been conducted within it.

The social-interactional approach views learning as socially constructed through interactants' locally situated activities in formal and informal interaction (e.g. Hua et al. 2007; Firth & Wagner 1997, 2007; Brouwer & Wagner 2004; Hall & Verplaetse 2000). Learning is, in other words, considered to be social in nature as it is jointly accomplished through the participants' engagement in their situated activities. Essentially, language learning and language use are seen as interconnected processes in that all language use situations are language learning opportunities for second/foreign language speakers (e.g. Markee 2004; Firth & Wagner 1997, 2007). More importantly, learning is viewed "as a set of socially distributed practices that are situated in the interactional space between conversational partners" (Markee 2004: 593) and, in general, as learners' "changing participation in discursive practices" (Young 2007: 251). In this way, learning has been studied from two perspectives: i) through the micromoments of social interactions and how participants produce local understandings in doing learning, and ii) through documenting change by tracing the potential developments in learner participation in different temporally spread contexts (Firth & Wagner 2007).

The foundations of the social-interactional approach lie in three theoretical fields: ethnomethodology, conversation analysis, and sociocultural theories of learning (Firth & Wagner 2007: 807). All these fields advocate the study of naturally occurring interaction as it is the primordial site in and through which participants' own understanding of their locally situated actions (e.g. Firth & Wagner 2007; Hua et al. 2007; Markee & Kasper 2004; Hall & Verplaetse 2000) and the potential change in their participation through longitudinal investigation (e.g. Cekaite 2006; Hellermann 2007, 2009) can be examined and described. Furthermore, because all three fields approach the study of learning from slightly different, yet complementary perspectives, together they offer a coherent frame through which to examine how learning is constructed through

interactants' socially shared activities. In ethnomethodology, the focus has been on describing how interactants achieve intersubjectivity, a shared understanding, of the interaction in which they partake through their "commonsense reasoning practices" (Firth & Wagner 2007: 807; Kasper 2009; see also Heritage 1984; ten Have 1999). For CA, the establishment of shared understanding through such practices highlights the fact that cognition, and learning, are an intrinsic part of the participants' processes of making sense in interaction and that socially shared cognition is ultimately "grounded in interaction" (Kasper 2009: 12). The emphasis in CA on observing the sequential organization of participants' social actions provides empirical tools to describe the participants' moment-by-moment construction of interaction, and simultaneously the ways in which they come to achieve intersubjectivity: these two interactional processes are visible in each and every turn the participants produce (Kasper 2009). Sociocultural theories, additionally, highlight the importance of how divergent cultural practices are socially mediated and negotiated within distinct communities of practice for their members (e.g. Lave & Wenger 1991). The sociocultural approach therefore advocates the close examination of how divergent communities of practice structure their activities and how the learning of different practices is rendered possible. By adopting a social-interactional perspective into examining people's interactional practices, it can be shown how interactants either do learning in the here-and-now of emerging interaction or how they become competent members of the community as the nature of their participation changes through learning over time. [6]

The research conducted within the social-interactional approach in the classroom setting can be characterized as having centred on describing learning from the viewpoint of teachers' and learners' co-constructed interactional practices and the distinct participation opportunities afforded by these within various types of classroom contexts (e.g. Ohta 2000; Markee & Kasper 2004; Mondada & Pekarek Doehler 2004; He 2004; Seedhouse 2004; Cekaite 2006; Niemelä 2008). For this reason, learner participation has not been a monolithically examined phenomenon, but rather it has been explored from various perspectives and levels of interaction. While some studies have focused on the nature of learner participation in teacher-led activities, others have centred on individual, pair or group work activities. In this respect, the social-interactional perspective differs from prior SLA research insofar as it takes as its focus all kinds of 'classroom talks' (Markee & Kasper 2004), not only teacher-led interaction.

The study of teacher-led activities has investigated, for instance, the ways in which learner engagement in classroom interaction is regulated by the teacher, and particularly, what kinds of participation roles learners are afforded and what kinds of language use opportunities are built for them through

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6 For the theoretical underpinnings of and developments in the social-intercultural approach to learning, see e.g. Firth & Wagner (1997, 2007), Brouwer & Wagner (2004), Markee (2004), Markee & Kasper (2004), Hall & Verplaetse (2000) and the special issues of *The Modern Language Journal* 2004 and 2007.

teacher actions (e.g. Hall 1998; Hall & Verplaetse 2000; Hall & Walsh 2002). In contrast, studies focusing on individual, pair or group work activities, or off-task talk, have shown how learners construct and negotiate different participation roles for themselves in and through the interaction (e.g. Mori 2002, 2004; Markee 2004, 2007; Cekaite 2006; Hellermann 2007). The learners' engagement in the interaction has not only been described through the kind of L2 they employ, but also through the diversity of semiotic resources (including artefacts) available to them (Cekaite 2009; Olsher 2003, 2005; Carroll 2005, 2006). These studies reveal how learners draw on such resources when they collaboratively seek to accomplish the varied interactional tasks that help them resolve potential classroom task-related problems. Some studies on pair or group work have in particular paid attention to the design of learner contributions, such as student self-selections (Cekaite 2006) and summons (Cekaite 2009), or such interactional sites as turn-beginnings (Gardner 2007) or task openings (Hellermann 2007), and their gradual change over time, leading to more competent participation.

Despite the large number of studies on learner participation, the structural shape of interactional practices per se has been examined only in the few studies on learner contributions mentioned above and in a handful of other studies (Tainio 2007: 18; see below). In other words, the way different interactional practices are designed by the participants has not been the primary focus; rather the goal has been to describe either the locally created shared understandings or the changes in the interactional patterns that show that learning in one form or the other has resulted. Admittedly, the shape of interactional practices and participation are intrinsically linked to one another and to learning, and therefore cannot easily be examined in isolation. The other studies that have illustrated how teachers and students design their actions within classroom interaction include, for instance, Mortensen's studies on teacher next speaker selections (under review) and establishing recipiency (2009), and Olsher's studies on embodied turn completions (2005) and gesturally-enhanced repeats (2008). In addition, Niemelä's (2008) description of the structural organization of whole class interaction has illustrated the ways in which teachers and students shape their emergent actions.

Broadly speaking, the social-interactional approach to learning has argued that learning takes place through the interactions in which learners participate, whether in the formal setting of the classroom or in their everyday encounters. It has also highlighted that the nature and level of learner participation in interaction has direct and indirect influences on what is learned and how. What is learned, then, is not only language but the socially situated practices of particular interactional contexts (Young 2007). That is, the various practices and ways of functioning in different interactive situations form the target of learning through the participants' engagement in the interaction. The learned practices can pertain both to the goals and tasks of the situation itself or to the interactional tasks and activities through which the goals are accomplished, i.e. the sequentially constructed institution of social interaction itself (e.g. Kasper

2009). The present study focuses on describing the latter through the detailed analysis of two classroom settings EFL and CLIL.

In the present study, therefore, the focus is on describing the range of multisemiotic resources teachers, and students, draw on and orient to in designing their turn-taking and repair actions. The study thus builds on our understanding of the interactional practices used by teachers and students by adopting a similar approach to describing interactants' actions as previously done by, for example, Carroll (2006), Olsher (2005, 2008), Cekaite (2006, 2009) and Mortensen (under review, 2009). Such an approach necessarily sets the learning of the subject content in the background, while foregrounding the structure of the participants' actions through which they display their understanding of how they manage to organize interaction. With this objective in mind, the participants' actions and their design will be discussed in relation to how they affect the unfolding interaction, and thus student participation, and what kind of participation is required from both teachers and students in order for them to be able to establish fluent interaction in the multiparty setting of classrooms. The findings will bring up issues related to the overall organization of classroom interaction, and also to teacher and student participation, that have not been explored before.

1.2.3 Interaction research in Content-and-Language-Integrated-Learning classrooms

The acronym CLIL – content-and-language-integrated-learning – is nowadays the generally used cover term in the European context for educational program(s) that embody the teaching and learning of non-language subjects through a foreign/second language and that have a dual learning focus, i.e. both language and content are targets of learning (e.g. Nikula & Marsh 1997; Marsh & Marsland 1999; Lehti et al. 2006: 295; Dalton-Puffer 2007). The acronym has been chosen as the 'umbrella term' "because it does not give emphasis either to language teaching and learning, or to content teaching and learning, but sees both as integral parts of the whole" (Marsh & Marsland 1999: 9).[7] It is also the term used in the Finnish context, and consequently, it is the term used in the present study.[8]

In general, according to Dalton-Puffer and Smit (2007: 12–15), the research that characterizes CLIL education can be represented as a matrix that contains

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7 Other terms include, for instance, bilingual education, content-based language instruction, language-based content instruction (e.g. Järvinen et al. 1999: 230) and content-based learning (Snow & Brinton 1997). There are thus many terms for foreign/second language-based teaching programs that derive their meanings on the basis of the nature of the program. For more detailed explanations, terminological specifications and listings, see e.g. Snow & Brinton (1997), Marsh (2002: 54–60), and Nikula & Marsh (1996: 6–7, 1997: 7–8).

8 I exclude here discussion of immersion education as a form of foreign/second language-based teaching, as it has its own specific framework and agenda that differentiates it from other bilingual programs (e.g. Baker 1995). However, I include some studies of L2 immersion in the theoretical overview as they provide interesting and important findings with respect to my arguments.

two dimensions along which CLIL studies can be placed. The first dimension is macro-micro and the second is product-process. The former indicates how the research approach taken to CLIL education, whether from the point of view of the educational system or from within the classroom interaction. The latter is concerned with either the outcomes of the program or the actual processes of how teaching and learning are carried out through classroom discourse. For Dalton-Puffer and Smit (ibid.), most of the research to date falls within the macro-product or macro-process quadrants of the matrix. Research in these quadrants has pertained to issues such as mother tongue development, target language acquisition skills, different types of assessment questions, questions on how language forms, functions and content are taught simultaneously, the outcomes and influences of the program on the curricula, and the kinds of qualifications of teachers and of teacher training and the latter's effects on teachers' teaching practices (see e.g. Snow & Brinton 1997; Mohan, Leung & Davison 2001; Marsh & Wolff 2007).[9] In the Finnish context, research has also pertained, among other topics, to participants' experiences of CLIL (Rasinen 2006), to students' content learning and their cognitive development (Jäppinen 2005), and to public discussions of CLIL education and its implications (Virtala 2002). Close examination of the different studies shows that they have mostly concentrated on investigating the three primary groups (i.e. teachers, students and the educational decision-makers/other stakeholders) involved in CLIL implementation and what kinds of learning outcomes, program developments, and educational implications CLIL education demands, affords and engenders in addition to its plausible drawbacks.

While to date CLIL education has been studied quite extensively within the other quadrants, not many studies have been carried out on classroom discourse from the micro-contextual process perspective (Dalton-Puffer and Smit 2007: 15). The research that has been conducted within this dimension has generally adopted an interactional perspective, looking at how language and content learning are rendered possible through the participants' interactive practices. The analytical loci in such studies have centred on describing, for instance, teachers' discourse strategies in the establishment of distinct engagement opportunities for learners, while they have not paid attention to the language forms used per se (see Hall & Verplaetse 2000). Other studies, in contrast, have illuminated the ways in which language is used in the classroom for particular interactive functions. Within this line of research is the work by Dalton-Puffer that centres on the use of different directive speech acts by teachers and students (Dalton-Puffer 2005, 2007; Dalton-Puffer & Nikula 2006), and on providing a detailed and extensive description of the kind of language use and language patterns (e.g. teacher questions and repair practices) employed in CLIL classrooms (Dalton-Puffer 2007).

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[9] For all the quadrants of the matrix, Dalton-Puffer and Smit (2007) provide references to relevant studies. The reader is referred to the article for specific references and a more detailed description of the matrix.

In Finland, research on CLIL classroom interaction, specifically on the ways in which teachers and students carry out their actions in the classroom, in addition to their actual language use, have not been so extensively investigated, although some studies have been conducted in this area as well (see also Nikula 2007b for a similar point). These have mostly been carried out by Nikula (2005, 2007a, b, 2008). Her research is fundamentally informed by discourse analysis and pragmatics as well as, to an extent, sociocultural theories of learning. Her research topics are heterogeneous ranging from investigations of teachers' directives (Dalton-Puffer & Nikula 2006) to comparisons of how and for what purposes Finnish and English are used in CLIL lessons (Nikula 2007a, 2008). Additionally, she has compared the use of the tripartite instructional sequence in CLIL and EFL lessons and described what the differences in its usage reveal about the teaching and learning practices of the two classrooms (Nikula 2007b). In addition to Nikula, Pehkonen (2008) has described CLIL classroom interaction from the perspective of the teachers' evaluative turns and how they are constructed. She has also taken into consideration how teachers design their evaluative turns through a range of semiotic resources. Thus her study has shed light on the intricate interactional practices of CLIL teachers (Pehkonen 2008).[10]

All in all, it can be said that CA-based interactional research on CLIL education remains scarce. Consequently, only the most relevant of the studies with a CA approach referred to above will be drawn on in what follows. As far as I am aware, none of the previous studies have examined teacher turn-allocation practices in CLIL classroom interaction, although repair practices have been studied by Dalton-Puffer (2007) and Smit (2007), and I will briefly return to their findings in chapter 3. More importantly, work on the role of embodied actions in constructing meanings is almost non-existent in CLIL education, except for Pehkonen's (2008) study. The present study attempts to fill in this gap by investigating the micro-processes of classroom interaction, the ways in which teachers and students organize and construct their turn-taking and repair actions on the sequential action-by-action level.

1.2.4 A three-dimensional view on context in classroom interaction

Above, I have sketched a rough outline of the fields of classroom interaction research within which the present study can be situated from the respective viewpoints of two institutional settings, the EFL classroom and the CLIL classroom. In the present section, I will try to bring the two settings together by suggesting a particular rationale through which the interaction in these classrooms can be described and explained in ethnomethodological conversation analytic terms. This rationale is based on and expands

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10 In addition, two national surveys on the nature and characteristics of CLIL education in Finland have been conducted (e.g. Nikula & Marsh 1996, 1997; Järvinen et al. 1999; Lehti et al. 2006). These have charted the number and educational level of the schools that offer CLIL education in Finland as well as their reasons for it, the subjects taught and the languages used in the program as well as its overall effects and teacher experiences.

Seedhouse's (2004) work on the interactional organization of L2 classrooms. He has suggested that the classroom context be viewed of as comprising three interrelated interactional contexts – micro, L2 classroom and institutional. What I will be suggesting is a slight modification of Seedhouse's view in that from CLIL classroom interaction the element of content is integrated into the picture. Before I do this, however, an overview is called for both of Seedhouse's rationale and of the fundamental similarities and differences between L2 and CLIL classrooms. I will begin with the former, after which a short description of the differences that characterise CLIL classrooms in relation to Seedhouse's rationale will be provided (a further description of the differences between EFL and CLIL lessons is given in chapter 4).

According to Seedhouse (2004: 183), the primary institutional aim of L2 classroom interaction is the teaching of the second language to the learners. He further suggests that "[t]here are three interactional properties which derive directly from the core goal, and these properties in turn necessarily shape the interaction" (ibid.). These three universally applicable and context-free properties are:

> 1. Language is both the vehicle and object of instruction.
> 2. There is a reflexive relationship between pedagogy and interaction, and interactants constantly display their analyses of the evolving relationship between pedagogy and interaction.
> 3. The linguistic forms and patterns of interaction which the learners produce in the L2 are potentially subject to evaluation by the teacher in some way.
> (Seedhouse 2004: 183–184.)

These particular features that are sequentially derivative of each other make up the "unique fingerprint of L2 classroom interaction" (Seedhouse 2004: 183). They are at play in different degrees in context-sensitive ways in the turn-by-turn unfolding of the actual classroom interaction, and teachers and learners display their orientation to them through their turns-at-talk (Seedhouse 2004: 194–199). That is, each turn, whether produced by a teacher or a student, evinces the participant's interpretation of the reflexive relationship between the pedagogical focus of the current context and the emerging interaction. The reflexive relationship between pedagogy and interaction is further manifested through the distinctively constructed interactional organizations of various L2 classroom contexts (Seedhouse 2004: 204–208). Seedhouse (2004) has identified four subvarieties for the larger, generic variety of L2 classroom interaction. These are form-and-accuracy, meaning-and-fluency, task-oriented and procedural contexts. They can be talked in and out of being at any point during the interaction by either of the parties: teacher or students (Seedhouse 2004: 207). For instance, when the class is in the middle of checking the students' exercises in the form-and-accuracy context, a procedural context can be instantiated momentarily in order to negotiate how the checking is being carried out. The contexts can thus be dynamically engendered and negotiated on a moment-by-moment basis.

However, the generic variety of the L2 classroom context, and its subvarieties, is not the only contextual dimension that prevails in L2 classrooms. As pointed out above, Seedhouse (2004: 208–215) has suggested a three-way view of context that portrays the three perspectives "in decreasing circles" that fundamentally characterize L2 classroom interaction. In addition to the L2 classroom context, this view includes the *micro context* of interaction and the overall *institutional context* of interaction. These perspectives serve as a resource in understanding the complementarity of L2 classroom interaction in that they help portray "its simultaneous heterogeneity (or unique nature) and homogeneity (or institutional sameness)" (Seedhouse 2004: 209). This heterogeneity, or uniqueness, is manifested at the micro contextual level of interaction as all the participants' turns-at-talk hardly ever take the same form or the same response. Instead they are locally situated productions within the unfolding discourse. L2 classroom contexts, for their part, exhibit a certain degree of homogeneity in, for instance, their turn-taking organization and other organizational patterns. There is also variation within and between different L2 classroom contexts, for instance, in their overall structural properties. The homogeneity, or institutional sameness, derives from the three core properties of L2 classroom interaction reproduced above: when all of them are present in a piece of interaction, it can be considered as an exemplar of institutional L2 classroom interaction. As Seedhouse (2004: 213) states:

> "Every time participants produce L2 classroom interaction as defined here, they talk these three levels of context into being. All three levels are present and manifest at all times, and when one broadens or narrows one's perspective, one will tend to focus on a different level of context."

While the description of the relationship between pedagogy and interaction through the identification of the pedagogical focus is a methodological tool for the analyst, as it portrays the participants' interpretation of the interaction and how they understand it, the three-way model of context is more of a conceptualization of the prevailing characteristics of classroom interaction (Seedhouse 2004: 194–215). Seedhouse (2004: 215) also emphasizes that since it is "intended merely as an aid to conceptualization; one could add further levels to the model and expand or modify it in a number of ways." Before I do this, let us turn to CLIL classrooms and their particular characteristics for a moment, as it is important to understand how they differ from L2 classrooms and how the differences influence the possible modification of Seedhouse's model.

One of the main aims of CLIL education is to provide students with opportunities to use the target language, English in the case of my data, in real communicative situations – albeit not in authentic native speaker environment – and to develop their communicative and pragmatic skills in the target language (e.g. Nikula & Walsh 1996, 1997). To that end, the special type of language learning environment endorsed by CLIL education does not aim to evaluate the students' language production per se. On the contrary, it is the students' accumulating subject knowledge that is mainly assessed. Since the subject

content is the primary target of learning, the interactional goal of the instruction is meaning-making and the negotiation of meaning. Consequently, English is used, for example, in explaining and reflecting on different themes and topics and in expressing ideas and viewpoints (see e.g. Nikula 2005, 2007a, b).

This does not, however, mean that the students' language use is not evaluated or taken cognisance of. On the contrary, the students' language use through the way they construct their content-related answers is attended to by teachers, as Pekarek Doehler and Ziegler (2007) have demonstrated of immersion classroom interaction. Pekarek Doehler and Ziegler have especially paid attention to how teachers syntactically formulate their responses to students' answers and how these responses are designed not only to draw students' attention to particular linguistic constructions (both grammar and lexis), through which the target concepts are introduced and ratified, but also to how the relevant concepts are built through the sequential organization of interaction. The point Pekarek Doehler and Ziegler make is that in immersion classrooms the target language use and display of content knowledge are interwoven with the sequential organization and its structuring in such ways as to provide opportunities for both language and content learning. They conclude that from a social-interactional perspective "[l]anguage learning is understood as learning to deal with locally organized and sequentially structured discourse activities and hence rooted in the learner's participation in organizing talk-in-interaction, such as configuring participation structures or sequencing activities" (Pekarek Doehler & Ziegler 2007: 85).

Following Pekarek Doehler and Ziegler, I want to suggest that CLIL classroom interaction can thus be seen to manifest similar interactional properties and contextual perspectives as L2 classroom interaction, where there is a highly reflexive relationship between pedagogy and interaction and where the teaching and learning of content and language are intertwined. In this way, CLIL education can be seen to exhibit the same interactional properties as L2 classroom interaction, except that property number three needs to be adjusted slightly so that it incorporates knowledge of the subject matter as a potential subject for assessment in addition to the vehicle of instruction.

> 1. Language is both the vehicle and object of instruction.
> 2. There is a reflexive relationship between pedagogy and interaction, and interactants constantly display their analyses of the evolving relationship between pedagogy and interaction.
> 3. *The content matter, concepts and terms, as well as linguistic forms and patterns through which the content matter is presented through interaction by the learners* in the L2 are potentially subject to evaluation by the teacher in some way.
> (Adaptation of Seedhouse 2004: 183–184.)

More importantly, CLIL classroom interaction can be seen to demonstrate the same contextual decreasing circles perspective as L2 classroom interaction: institutional, language/content and micro (see figure 1). The micro contextual aspect is the same as in L2 classroom interaction in that the teacher and student turns are always locally constructed actions in the unfolding discourse, and

thus are unique and heterogeneous in nature. Similarly, the institutional context remains the same insofar as teachers and students construct their turns-at-talk and larger activities as inhabiting institutional forms of interaction that portray all the three properties of classroom interaction. On the institutional level, interactional elements are homogeneous and context-free. As in L2 classroom interaction, there are different contexts in CLIL classroom interaction that differ in their interactional organization vis-à-vis each other, i.e. in the manifestation of the reflexive relationship between pedagogy and interaction.

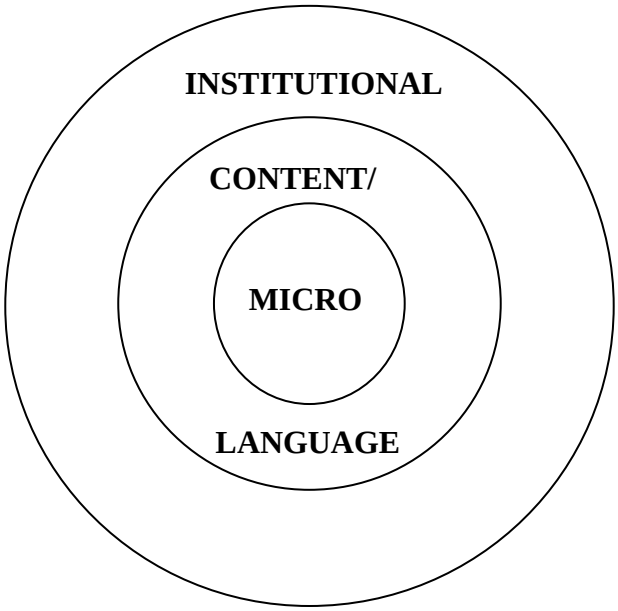

FIGURE 1 A three-dimensional view of context in classroom interaction (adapted from Seedhouse 2004: 210).

In the present study, I will try to show how the reflexive relationship between pedagogy and interaction is manifested through the organization of turn-taking and repair in both EFL and CLIL settings. This will mostly be discussed in chapter 7, after I have first described the teacher turn-allocation practices in chapter 5 and repair practices in chapter 6 that I have encountered in my data.

1.3 Organization of the study

The study extends to seven chapters. Following this introductory and contextualizing chapter are two theoretical chapters (2 & 3), which lay a foundation for the empirical chapters (5 & 6) by providing an account of the most essential research conducted on turn-taking and repair practices in everyday and institutional interactions. At the same time, the different interactional organizations, which interactants have been found to orient to normatively in constructing and deciphering meanings are introduced.

In chapter 2, the focus is on the organization of the sequence, turn-taking and turn design. The organization of sequence and turn-taking are first briefly described through the ways in which they are employed by interactants in everyday interactions, after which the focus shifts to that of classrooms and the institutionality of interaction. The discussion of how interactants employ the different interactional organizations builds an understanding of the lineaments of everyday and classroom interaction. The discussion, in particular, delineates how the role of embodiment figures in participants' sense-making practices. The interactional organization of turn design, in contrast, is addressed from two perspectives: the nature of the relationship between talk and embodiment in turn-constructions, and how interactants' project the nature of their next actions through embodied means.

Chapter 3 focuses on the organization of repair in everyday and institutional talk-in-interaction and the ways in which people manage misunderstandings or other kinds of trouble while trying to maintain intersubjectivity. An account of the most central studies conducted in the field of CA (and discourse analysis) is given, with a focus on classroom repair and the instructional practices of accomplishing repair. The chapter is divided into four sections that cover the aspects of everyday repair, classroom repair, the use of third turn position to initiate or perform repair within the IRE sequence, and the role of embodiment in repair practices. The treatment of the preference organization is woven into the discussion.

The data and the analytical framework of the study are described in more detail in chapter 4. The data recording process, the participants, the classroom settings, the lessons and their activities, and the transcription conventions used are all described and contextualized. A description of the data collection is also given. In addition, important ethical issues related to data collecting are briefly discussed.

Two empirical chapters follow the methodology account. Each analytical chapter focuses on one kind of teacher practice and provides detailed examples of how teachers guide their students' actions in classroom interaction. In chapter 5, teacher turn-allocation practices are sketched by identifying the different embodied actions teachers employ in allocating response turns to students. Such a shift in focus draws attention away from the verbal turn-constructional level of turns-at-talk to the ways in which the interactional task of turn-taking is organized via the use of such embodied means as gaze, head nods and pointing gestures in addition to linguistic forms: to the turns-of-action the participants perform.

Chapter 6 takes a closer look at how teacher third turn actions within the IRE sequence are designed in and shaped by their sequential context to either initiate or perform repair. The emphasis is on how teachers project the emergence of repair actions through the use of different semiotic resources in different sequential positions. It also provides an account of how teachers deploy the contextual configuration of particular activity frameworks in sequentially sensitive ways in projecting their dispreferred next actions.

The findings of the study are drawn together in chapter 7 in a discussion that addresses how the study of embodiment-in-interaction can broaden the traditional view of the sequentiality of turns-at-talk into turns-of-action and their overlapping nature in the institutional interaction of classrooms.

2 SEQUENTIALITY, TURN-TAKING AND TURN DESIGN IN INTERACTION

Conversation analysis aims to uncover the distinct interactional practices through which humans construct interaction as orderly. From the CA perspective, interactants are seen to collaboratively create their locally situated interaction action-by-action and to display their normative orientation to the different kinds of interactional organization embedded within and manifested through talk-in-interaction. It has been suggested that there are potentially five different kinds of interactional organization (i.e. sequential, turn-taking, repair, turn design and preference organization) that are manifested in all kinds of interactions ranging from ordinary conversations to institutional interaction, from workplace encounters to online chat rooms and so forth. Classroom interaction as a form of institutional interaction is thus organized on the same basis as other interactions, although, as will be shown in the following sections, there are some fundamental differences between classroom interaction and that of everyday conversations. To understand the characteristics that distinguish classroom social actions from those of ordinary conversations, a description of the research findings on the organization of everyday conversations is warranted. The present chapter thus lays a foundation for the subsequent analysis of teacher turn-allocation and repair practices by illuminating from a CA perspective how social interaction is structured and managed.

The primary focus in the present chapter will be on three interactional organizations: sequential, turn-taking and turn design organization. As the chapter proceeds, they acquire increasing content and depth, while at the same time the role of preference organization is built into their description. More importantly, the phenomenon of projection-in-interaction is brought up in several sections as projection is an essential part of how people are able to prepare for and structure their interaction as coherent, orderly and systematic.

The chapter begins with a description of the sequential organization (section 2.1) as this is the largest domain of interaction in the sense that orientation to it influences how interaction is by and large structured from single turns-at-talk, or turns-of-action as I prefer to call them, to different types

of action sequences, and still further to larger everyday and instructional activities. The section first introduces the basic sequence organization: the adjacency pair (section 2.1.1), after which follows a description of the three-part instructional sequence characteristic of classroom interaction (section 2.1.2). The next step is to depict the turn-taking organization (section 2.2): how speaker transfer is accomplished in mundane and institutional varieties of talk. The section presents an overview of the systematics of the organization of turn-taking as described by Sacks, Schegloff and Jefferson (1974) (section 2.2.1) as well as its classroom variation by McHoul (1978) (section 2.2.3). Sections 2.2.2 and 2.2.4 delineate the turn-allocation apparatus, first for ordinary conversations and then for classroom interaction. In section 2.3 the organization of turn design is approached by reviewing research that has explicitly addressed the relationship between talk and embodiment and by presenting my own view of the issue (section 2.3.1). The organization of preference in turn-constructions and how dispreferred turns are projected through embodied means is also discussed (section 2.3.2). The discussion has immediate relevance to the analysis in chapter 6 and the construction of teacher repair practices. As the central focus in CA work has been on bringing to light the various resources participants employ in their meaning-making, the previous research discussed throughout the chapter includes both the use of talk and the different embodied resources. The discussion also includes studies made in other research paradigms, primarily in connection with classroom interaction research.

2.1 Sequentially organized turns-of-action with preferential implications

All forms of social activities are constructed through sequentially organized actions, which also constitute the immediate interpretive context for those actions (e.g. Heritage 1984; Hutchby & Wooffit 1998: 38–39). In CA, this phenomenon is generally referred to as the context-shaped and context-shaping character of sequentially structured actions (e.g. Heritage 1984, 1997; Drew & Heritage 1992: 18–19). Essentially, each turn-at-talk in any interactional event is fitted into its sequential position so that it fulfils its interactional task, i.e. the sequentially relevant action it performs, and as such it conveys the current speaker's understanding of the prior turn and the action it made relevant. At the same time, the turn-at-talk provides a context for the following turn: what kind of a relevant next action it projects. This characterization reveals the interconnectedness of the turns-of-action and the fact that they are not randomly produced, but are essentially linked to one another by their action content (e.g. Schegloff 2007: 1–12; Hutchby & Wooffit 1998: 38–39). That is, they are contingently produced one after the other to build coherent and meaningful interaction (Schegloff 1990). The basic sequential structure at the core of all interaction is the adjacency pair, to which I will now turn.

2.1.1 The basic sequential structure: adjacency pairs

The adjacency pair is the most pervasive feature of interaction and it consists of a first-pair part and a second-pair part (e.g. Schegloff 2007; Hutchby & Wooffit 1998; ten Have 1999). The first-pair part generally initiates an action sequence and the second-pair part responds to this initiation by completing the action sequence (Schegloff 2007: 13). The first-pair part and the second-pair part can form distinct pair types and comprise, for instance, greeting-greeting, answer-question, invitation-accept/reject action pairs (ibid.). In other words, each initiating action sets expectations for a specific kind of a response action that is rendered conditionally relevant so that its noticeable absence becomes a matter of accountability (Schegloff 2007: 20; Hutchby & Wooffit 1998: 42; Heritage 1984: 254). For instance, if I were to invite you to the movies, you would have to either accept or decline the invitation. By providing a related second-pair part to my first-pair part, you display that you have understood my utterance as performing the action of inviting. If you did not respond to my invitation, I would begin to wonder why and most likely would demand a reason for it. Interactants thus constantly make inferences about the kinds of actions utterances, or embodied actions, perform and display their understanding through appropriately constructed next turns (cf. next-turn proof procedure, Hutchby & Wooffit 1998: 15; Sacks et al. 1974).

Not only is the second-pair part conditionally relevant after a first-pair part, it is also the case that with some adjacency pairs a particular type of responsive action is interactionally constructed as more preferred than others (Schegloff 2007: 58–63; Hutchby & Wooffit 1998: 43–47). Quite a few adjacency pairs have alternative second-pair parts, such as invitation-accept/refuse, offer-accept/refuse and assessment-agreement/disagreement, which are not of equal standing. In general, one of the alternative responses is the preferred response, while the other is the dispreferred one. For instance, in the above example, if you were to refuse my invitation, it would constitute a dispreferred action as generally there is an expectation that invitations are accepted. Additionally, you would probably design your refusal in a manner which reveals your awareness of this: the turn shape would be that of a dispreferred response. While doing so, you would try to establish mutual understanding of what is taking place, i.e. to achieve intersubjectivity (Heritage 1984: 256) and simultaneously to maintain social solidarity between us (Heritage 1984; Hutchby & Wooffit 1998: 46). This preference organization of adjacency pairs is thus manifested at two levels of interaction that are reciprocal: at the sequential level of organization and at the turn-constructional level (Hutchby & Wooffit 1998: 45–47; Schegloff 2007: 58–96; ten Have 1999: 120; also Pomerantz 1984).

Although the adjacency pair is the fundamental sequence structure in talk-in-interaction, as an action sequence it is not limited to a tightly woven two-turn structure format. Rather it can be expanded to include pre-expansions, insertions and post-expansions in such a manner that long stretches of talk can take place in the accomplishment of one particular social action, e.g. making an invitation and accepting/refusing it (Schegloff 2007: 26–27; see also Schegloff

1980, 1990). The fundamental feature of these divergent expansions, particularly with insertion sequences, is that whatever social action is initiated in the first-pair part, the second-pair part is made conditionally relevant, and it continues to be relevant until it is produced (Schegloff 2007: 97–100; Raevaara 1997: 80–81; Seedhouse 2004: 17–22). The turns of the insertion sequence aim then to clarify something in relation to the first-pair part and its projected second-pair part. The coherence of talk as experienced by the participants themselves can be traced by identifying the different sequentially organized actions the participants perform and make visible in and through their interaction, whether these actions consist of minimal adjacency pairs or more elaborate stretches of talk (Schegloff 1990).

Interaction is thus built to meet the interactants' locally situated purposes as they reflexively draw on the flexibility of the sequential organization and the turns-of-action. In institutional, and particularly in instructional interaction, the basic adjacency pair structure is generally followed by a third turn, a possible evaluation, feedback or comment on the second-pair part and its relevance and appropriateness vis-à-vis the first-pair part (e.g. Drew 1981; Tarplee 1996; Arminen 2005: 113–114; Tykkyläinen 2005; Schegloff 2007: 221–223; Lee 2007). The three-part activity sequence that created is in such settings is utilized in the service of accomplishing the institutional (or instructional) task at hand (Heritage 1997; Drew & Sorjonen 1997; Drew & Heritage 1992).

2.1.2 The three-part activity sequence of classroom interaction: IRE

Numerous classroom studies in different research paradigms have noted the prevalent usage of the three-part instructional sequence in classroom interaction as a means to construct teacher-led activities (e.g. Mehan 1979; Sinclair & Brazil 1982; Leiwo et al. 1981; Leiwo et al. 1987a, b; Sinclair & Coulthard 1992; Nassaji & Wells 2000; Hall 1998; Hellerman 2003; Seedhouse 2004; Margutti 2004; Lee 2007). Mehan (1979), in his ethnographic study on classroom interaction, has termed the activity sequence as Initiation-Response-Evaluation, IRE in short.[11] It consists of a teacher's initiation, of a student's response and of a teacher's evaluation of the student's response. For Mehan (1979: 54), the three-part sequence basically comprises two adjacency pairs: initiation–reply and reply–evaluation pair-parts. However, as in mundane conversation, the different parts of the instructional sequence can be expanded to include different types of pre-expansions, insertions and post-expansions: it has a permutable character. Niemelä (2008) refers to such instructional sequences as complex IRE sequences. Mehan (1979: 92) suggests that the initiation and response pair-parts are not always directly adjacent in that an insertion sequence of students bidding for a turn and a teacher nomination of the next speaker is created between them (also Sinclair & Brazil 1982: 50; Lemke

[11] Other terms for the instructional sequence include the teaching exchange (IRF, Sinclair & Coulthard 1992), the triadic dialogue (Lemke 1990), the utterance triad: Question-Answer-Comment (McHoul 1978: 191), and the pedagogic cycle (Arminen 2005).

1990: 8; Karvonen 2007: 122). The teacher can also explicitly request students to bid either as part of the initiation act or as a separate action, which leads to yet an additional insertion action between the 'initiation–response' adjacency pair (Mehan 1979: 92; Lemke 1990: 8). This particular insertion phenomenon between the first adjacency pair will be elaborated in the present study, as the analysis will shed light on the different sequential positions in which teacher turn-allocations are delivered within the basic three-part sequence.

Besides the actions that relate to the above mentioned turn-taking practices, insertions can additionally consist of teacher prompts when students have not provided a response to a teacher initiation (Mehan 1979: 54–55, 90–92; Candela 1998). Before and after the basic three-part sequence, Lemke (1990: 8) has proposed that a preparative action – i.e. a pre-expansion – can take place before the actual initiation is performed, and that an elaboration – i.e. a post-expansion – after the evaluation can be produced. These expansions can serve to prepare the students for the activity at hand as well as to summarize or paraphrase the students' answers for the whole class (see also Niemelä 2008).

While many classroom studies have shown the high prevalence of the IRE action sequence in teacher-led plenary talk (Mehan 1979; McHoul 1978; Leiwo et al. 1981; Leiwo et al. 1987a, b; van Lier 1994; Hellermann 2003; Nikula 2007; inter alia), several CA-based studies have shown its flexibility and local adaptability into different types of classroom contexts and interactional sequences (Lerner 1995; Seedhouse 2004; Markee & Kasper 2004; Markee 2000; Margutti 2004; Hellermann 2005; Lee 2007; Niemelä 2008). Mehan (1979: 65–80), for instance, has described how the IRE sequence is used in classroom interaction to make up larger "topically related sets", i.e. activities and their parts, and further to construct different phases of lessons and the overall structure of lessons. Hellermann (2005), on the other hand, has shown how the three-part sequence is recycled to build coherent activity segments within larger classroom activities and how these activity segments are differentiated from each other through distinct syntactic and prosodic practices. Where Mehan has described the use of the IRE in terms of the topic at hand, Hellermann has looked at how the different parts of the sequence are interactionally jointly constructed to form activity segments (Hellermann 2005: 106). The use of the IRE sequence has thus been described from different sequential and interactional perspectives.

The third part of the IRE sequence – the evaluation[12] – basically constitutes the second-pair part of the adjacency pair 'student response–teacher evaluation' (Mehan 1979). Such evaluations, as other second-pair parts, can be viewed in the light of the preference organization insofar as a positive evaluation can be considered to represent a preferred action and a negative evaluation a

12 In different studies, the third turn has been labelled as comment (McHoul 1978), feedback (Sinclair & Coulthard 1992; Hellermann 2003) and as follow-up (Nassaji & Wells 2000). In more recent CA work it has been referred to as the third turn receipt (TTR) (Margutti 2004) or, merely, the third turn (Lee 2007). Henceforth, when I refer to particular classroom studies, I will refer to the three-part sequence through the term each researcher has used.

dispreferred one (Macbeth 2000: 39). In the former case, the positive evaluation closes the instructional sequence, after which the cycle can be begun anew (Mehan 1979; Markee 2000: 71).[13] In the latter case, the third turn is used to initiate or perform repair on an inappropriate or somehow problematic student response, and in that way it can be used to extend the basic IRE sequence in a variety of ways (see e.g. van Lier 1994; Seedhouse 2004; Lee 2007; Niemelä 2008; chapter 3).

In general, research has revealed that the evaluation is a crucial part of the IRE sequence. However, in some L2 classroom contexts, as Seedhouse (2004: 106–107) has shown, the evaluation is optional in that it can be omitted or it can be implicitly conveyed through the interaction (see also Tykkyläinen 2005: 93–96 for speech therapy sessions). For instance, in form-and-accuracy contexts, teachers occasionally perform a positive evaluation through an embodied action: it is not verbalized at all, and thereby it does not figure in the sequential organization when viewed from the perspective of turns-at-talk (Seedhouse 2004: 106–108). A positive evaluation can also become clear when no repair actions are initiated by the teacher in the third turn; instead a new instructional sequence is initiated immediately after a student's second turn answer. As such, the basic sequential structure used in the particular L2 classroom context is an adjacency pair, which Seedhouse (2004: 107) has named 'teacher prompt–learner production'. The role of the third turn in the organization of repair in instructional interaction is discussed (in detail) in section 3.4.

Apart from serving in the sequential construction of pedagogical interaction, the IRE sequence intricately manifests the institutional role teachers inhabit in classroom interaction as they have the right to control who is speaking and when, what kinds of actions are to be instantiated in the initiation slot, and what kinds of student responses are adequate or appropriate, to give but a few examples. The nature of student participation and the social order of classroom interaction can be seen to be to a large degree teacher managed via the organization of turn-taking in classroom interaction; however, students have means to influence the interaction as well. What kind of turn-taking organization characterizes classroom interaction, and ordinary interaction, is discussed in the following section. At the same time, a more profound picture of the nature of the IRE sequence within classroom interaction will be gained.

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13 Within discourse analysis, the same finding has been made, for instance, by Leiwo et al. (1987a, b) and in the sociocultural field by Hall and Walsh (2002) in their recapitulation of prior work on teacher-student interaction. Hall and Walsh's (2002) discussion on language learning and the role of the IRE sequence reveals that it is generally used to build two types of instructional sequences: the lock-step IRE sequence, where teachers accept student answers in the third turn and which do not accommodate learner participation, nor language learning. The second type consists of more elaborate sequences, where teachers use the third part to elaborate on students' responses and to encourage discussion and students' possibilities to participation, and consequently to language learning (see also Hall & Verplaetse 2000).

2.2 Turn-taking practices in talk-in-interaction

Talk in interaction is systematically organized so that predominantly one speaker speaks at a time and speaker transfer takes place and is enacted as smoothly as possible in order to avoid long overlap of turns or long pauses between turns. This finding was introduced by Sacks, Schegloff and Jefferson (1974) in their seminal paper on the systematic nature of the organization of turn-taking in ordinary conversation. They emphasized that taking of turns is a basic feature of any interactional event: it enables the sequential organization of interaction, and as such it can be described as having a context-free character (Sacks et al. 1974: 699–700). At the same time, turn-taking is context-sensitive in that it can be locally adapted to a variety of formal and informal interactional settings and their varying participant configurations (see also Seedhouse 2004: 42–46). Interactants orient to this dual character of the turn-taking organization and utilize it to bring off their social, cultural and institutional tasks and goals.

These basic features of the organization of turn-taking are the focus of the present section, which describes the basic features of turn-taking in mundane interaction and the research conducted on the organization of turn-taking in classroom interaction. References to other institutional settings will also be made. The decision to concentrate primarily on classroom interaction studies is practical as not many studies have examined the organization of turn-taking per se; rather characteristically it has been described as part of social actions and their accomplishment.

2.2.1 The basic features of the organization of turn-taking

Sacks, Schegloff and Jefferson (1974) proposed a set of rules for the organization of turn-taking in talk-in-interaction and the two components that characterize it. The two components of the system are the turn-constructional and turn-distributional components. The former is characterized by the various unit-types – sentential, clausal, phrasal and lexical – which form the possible building blocks, the turn-constructional units (henceforth TCUs), of a speaker's turn (ibid.). While the characterisation of TCUs by Sacks et al. (1974) is centred on talk, recent studies on embodiment have shown how embodied resources can also constitute TCUs in a speaker's turn (e.g. Olsher 2005; Klippi 2006). The latter, in contrast, deals with how turns are allocated to parties in interaction (see next section).

Underlying the two system components is the transition-relevance place (henceforth TRP), where speaker change is rendered possible, but not always necessary. The TRP occurs after each recognizably complete turn-constructional unit (Sacks et al. 1974: 702–703). That a turn is approaching its completion becomes known by the turn-constructional unit with which the turn is begun and the type of interactional action it projects for the current turn. The projectability of turn completion and turn TRP play a crucial role in the

organization of turns insofar as interlocutors can anticipate the type of turn and its function as well as the kind of turn-transfer taking place.

The set of rules for the organization of turn-taking comprise two main rules, which are based on the two components outlined above (Sacks et al. 1974: 704). Fundamentally, the rules state under which conditions speaker transfer takes place and what happens when the next turn is allocated by the current speaker and when it is not. For instance, rule 1a) stipulates that when 'the current speaker selects the next speaker' allocation technique is used in the current turn, the allocated speaker has the obligation and right to take the floor at the next TRP. Rule 1b) stipulates that if the current turn does not reveal any next speaker selections by the current speaker, the next speaker can self-select, and the first party to do so has the right to the floor at that point.

The rules provide a systematic and a normative basis for the organization of turn-taking for interactants. They do not, however, determine, for instance, the length of turns or conversation, the number of the participants, the distribution of the turns beforehand or what is conveyed through the conversation when the interaction at hand is ordinary conversation (Sacks et al. 1974: 701). What they do portray is the above-mentioned dual nature of conversational organization: its simultaneous context-free and context-sensitive property (Sacks et al. 1974: 699–700). This property reflects the fact that the 'formal apparatus' of the turn-taking organization is applicable to a range of conversations and interactions, but "in such ways that it can, in local instances of its operation, be sensitive to and exhibit its sensitivity to various parameters of social reality in a local context" (ibid.). That is to say, the apparatus is reflexively and contingently adapted to the participants' local, situated purposes as it is given a variety of forms in divergent interactional contexts.

In the case of institutional interactions, the dual property is highly reflected in the manner in which it can be locally harnessed in the service of creating the institutional interaction and in the accomplishment of its goals (e.g. Drew & Heritage 1992; Heritage 1997; Peräkylä 1997). Whereas informal, ordinary conversation is considered as the interactional variety of talk in which turn-taking is locally managed and negotiated turn-by-turn, institutional interactions have more or less pre-allocated turn-taking systems, some more fixed than others (Sacks et al. 1974: 729). For instance, debates have a strictly pre-allocated turn-taking organization, whilst business meetings have a less fixed order, i.e. it is possible to locally negotiate speakership as interaction unfolds. In AA meetings, the organization of participants' turns-at-talk is predetermined so that the participants take turns one after each other, most often sitting in a circle (Arminen 2001; Halonen 1999). When speaker change occurs, the turns are constructed as long monologues during which an AA member has the possibility to share his thoughts and feelings with others. But how are turns actually distributed in interaction?

2.2.2 The establishment of next speakers through verbal and embodied means

According to Sacks et al. (1974: 703), there are two techniques by which turns are distributed in interaction: the current speaker selects the next or a person self-selects. In the following, I will outline some of the findings on the ways in which both language and bodily actions are employed in the construction of turn-allocations in ordinary, and in some institutional, conversations for both types of turn-allocation techniques. I do this in order to provide an understanding of how speaker change can be accomplished through a variety of means.

In general, the basic device through which next speakers are selected with the 'current speaker selects the next' technique, is the first-pair part of an adjacency pair, such as a question, that sets expectations for the recipient of the current turn to take the next turn (Sacks et al. 1974: 716–717; Lerner 2003). But the production of a first-pair part does not necessarily reveal its intended recipient in itself, unless, for instance, an address term (i.e. a person's name) or some other identifying term in combination with a potential gaze directed towards the recipient is incorporated into the turn-construction (Sacks et al. 1974: 717; Lerner 2003: 224–225). Lerner (2003) proposes that the use of an address term and a gaze are explicit ways of selecting next speakers. However, current speakers can also use more tacit selection constructs, for instance the pronoun 'you', when specific address forms are not used. By tacit forms, Lerner (2003: 190) refers to the ways through which next speakers are selected through the interplay of the situation, the participant configuration, the context and the topic of talk as well as the design of an initiating turn that restricts the number of the possible addressees (also Sacks et al. 1974). Apart from selecting and identifying next speakers via first-pair parts, they can be selected through other verbal devices (e.g. tag questions) and in other sequential environments (e.g. repair initiators in second turn position, in which case they select the prior speaker as the next speaker) (Sacks et al. 1974: 717–718).

Research on embodiment has shown the importance of the use of gaze in the organization of turn-taking in interaction, and especially in singling out next speakers. Gaze is used as a means to communicate that the gazed-at recipient is the intended next speaker in first language conversations (e.g. Sacks et al. 1974; Goodwin 1981; Tiittula 1985; Kendon 1967, 1990; Lerner 1993, 2003; Streeck 1995), and in different kinds of institutional situations, such as AA meetings (Halonen 1999). Such studies have revealed that current speakers tend to shift their gaze towards the intended next speaker as they approach the TRP of the current TCU or during a pause between turns. The gaze shift conveys to the recipient both that the recipient is the intended next speaker and that this is the place to produce the relevant next action. It has also been shown that gaze can be directed towards the recipient at different points during the current speaker's TCU to indicate that the recipient's collaborative participation in constructing the current turn is requested, for instance, during word searches (e.g. Goodwin & Goodwin 1986; Streeck 1995; see also Carroll 2006).

In addition to gaze, other embodied resources, such as gestures, head nods and body shifts together with talk have been shown to be employed by interactants to indicate turn-taking. For instance, Streeck (2009: 174–176) has illustrated that a particular type of open-hand gesture can be used as an indication of turn completion, and simultaneously as a means to solicit a response from the recipient at the TRP. Tiittula (1985) has also found that head nods can function as turn completion signals, thus projecting speaker change, but it may not be their sole function within the current turn. Other devices accomplishing the same include leaning back in one's chair and ceasing to move one's hands (Tiittula 1985: 98). The different types of turn-final gestures help indicate the boundaries of TCUs and enhance the fluent organization of turns and the management of speaker change (Streeck 2009).

Halonen (1999: 341–342), on the other hand, has observed that the participants in AA meetings display the shift in speakership by a specific change in their body posture, before the end of the ongoing TCU, that signals the end of their multi-unit turn. The body shift involves the current speaker leaning back in the chair, thus projecting the end of the current speaking turn. Similarly, the incipient next speaker shifts into a forward lean when preparing to begin the next turn-at-talk. This change in the participants' postural configurations clearly displays the transformation in the ongoing participation framework and guides the participants' orientation of how the interaction is to unfold. Additionally, Halonen (1999) has observed that head nods are used explicitly to signal to next speakers that it is their turn. Head nods are especially used for accomplishing speaker transfer in such sequential places where the next speakers are uncertain of whether the prior speaker is going to continue or not.

When the current speaker has not explicitly or implicitly selected the next speaker, potential next speakers have the possibility to self-select themselves in order to get a turn-at-talk (Sacks et al. 1974). Self-selection is accomplished by whoever gets the first start after a current speaker has come to a completion point of the current TCU. In order to be able to be a first starter, a recipient is required to parse the current TCU and its temporal progressivity which helps project the possible end of the turn and the place for a turn-entry. One technique Sacks et al. (1974: 719) suggest for successful self-selections is the use of appositionals that function as 'turn-entry devices'. Apart from that, they do not provide examples of how self-selections are made in conversations. As Mondada (2007: 197) points out, this is due to the fact that Sacks, Schegloff and Jefferson wanted to describe the abstract, context-free nature of the turn-taking machinery rather than depict its particular context-sensitive features and the actual accomplishment of turn-taking. Lerner (1993: 226–227) alludes to the fact that any sequence-initiating action in a multiparty conversation that does not specify the next speaker implies that the second-pair part needs to be actualized through a self-selection by anyone of the other participants than the current speaker. If such a second-pair part is not produced, its notable absence becomes a matter of accountability for the participants.

Self-selections as an analytical phenomenon per se from an embodied perspective have been studied by Streeck and Hartge (1992) and Mondada (2007). Streeck and Hartge (1992) have observed that gestures (facial and hand) are used by Ilokano speakers as turn-entry devices at TRPs. Next speakers employ gesturing as an indication of their incipient speakership, thereby signalling the emerging shifts in the current participation framework. Additionally, such gestures can convey the particular type of action projected for the next turn, thus contextualizing what the talk that is to be produced is about (Streeck & Hartge 1992; see also Streeck 2009). The additional import of these types of gestural productions is that they enable the incipient next speakers to reserve or to retain the conversational floor to themselves at the first possible place without a danger of producing their turn in overlap with prior speakers (Streeck 1995: 104).

Mondada (2007) has explicitly looked at interactants' pointing gestures and how these serve to project their changing participation role as incipient next speakers in a particular workplace environment, a meeting of agronomists and computer scientists. Her analysis has centred on a particular situated activity, in which the interaction is mediated by a variety of artefacts that lie on a table and in which the participants' collective attention primarily centres on these artefacts and their role in the purpose of the meeting. She has observed that the recipients parse the current speaker's TCUs for their completion, and signal via the use of pointings at different positions of the TCU or at a TRP their emerging speakership. The pointings are performed, for instance, in turn-initial positions or before TCU completions, thus projecting the imminent speaker transfer. More importantly, these pointings shape the unfolding interaction as the other participants visibly orient to them and adapt their own actions accordingly, e.g. by not trying to self-select themselves as next speakers. But Mondada (2007: 220) also points out that such a use of an embodied action to project a shift in the participation framework and to organize interaction "exploits the context sensitive specificities of the ecology of action" that the "peculiar spatial and material environment of the interaction, constituted by a table covered with documents, maps and other visualizations" renders possible. In other words, the particular contextual and participation configurations of the workplace setting enable the participants to use such self-selection opportunities as pointing gestures. The case with classroom interaction and the turn-allocation machinery that it exhibits and affords is in some respects similar in that the participants exploit the contextual configuration of classrooms, as will be shown in the analysis.

By and large, all of the embodied resources described in the prior research have strongly been related to the ongoing verbal TCUs and their emergent construction. The allocation of turns to next speakers or the self-selection of next turns has thus taken place through the construction of multiple verbal and embodied resources. The present study will elaborate on how the different embodied resources are used not only together with talk, but also in their own right in the enactment of speaker transfer in classroom interaction. The next two

sections detail prior work on the organization of classroom turn-taking and the different forms of participation that can be instantiated through it.

2.2.3 The turn-taking organization of classroom interaction and participation

The organization of classroom turn-taking has been described in several studies from different perspectives (e.g. McHoul 1978; van Lier 1994; Thornborrow 2002; Seedhouse 2004). However, Alexander McHoul (1978) was the first to compare content (L1) classroom interaction to the systematic turn-taking organization of everyday talk presented by Sacks et al. (1974). As a result, he formulated a set of rules that apply to the institutional setting of classrooms. Leo van Lier (1994), in contrast, has classified the different types of turn-taking categories that can occur in L2 classroom interaction as a way to reveal what forms of participation are enabled in classroom interaction. In the following, I will detail McHoul's work, after which I will discuss how other researchers have characterized the turn-taking organization of classroom interaction. Van Lier's (1994) findings, in particular, will be alluded to in the analysis.

A somewhat simplified version of McHoul's rules for turn-taking in the classroom would be the following (adapted and translated from Tainio 2007: 33):

> I After a teacher turn has come to completion:
> A) The teacher selects a single student as the next speaker, who then takes the floor.
> a) The teacher nominates or otherwise clearly displays the next speaker.
> b) The teacher directs the turn to the whole class or a group of students from which one of them should be selected.
> B) If a student does not take the floor, the teacher continues.
> II After a student turn has come to completion:
> A) If a student does not select the next speaker, the teacher continues.
> B) If a student selects the next speaker, it should be the teacher.
> C) Only if the teacher does not continue, can the student selected continue as the current speaker.

These rules portray the context-free property of the turn-taking system in that one speaker speaks at a time and speaker transfer is carried out through orientation to the basic turn-allocation and turn-constructional components. However, one important feature that separates this from everyday talk is that students do not have the possibility to select other students as next speakers after their turn as the speakership almost automatically is transferred to the teacher (McHoul 1978: 188). In this respect, classrooms have a pre-allocated turn-taking organization (also Markee 2000: 87; Sahlström 1999; Mortensen under review).

What the rules also portray is that although classrooms can be characterized as a multiparty setting, classroom interaction is fundamentally viewed as a two-party interaction, in which the teacher is the one party and the whole class of students as a collective cohort is the other party (Lerner 1993, 1995, 2002; Sahlström 1999). Sahlström (1999: 82) has termed the student cohort

"the Student", "who shares turns with the other speaking party, the teacher". The organization of turns thus reflects this two-party configuration, for instance in the form of the IRE, in which the teacher initiates the action sequence and the students produce the second part, after which the teacher evaluates the response or comments on it in some way. If the IRE is actualized in this rigid form, the teacher's talk will occupy every other turn in the interaction (e.g. Sahlström 1999: 82; Edwards & Westgate 1994: 119). The particular participant configuration of classrooms and the goal-oriented nature of classroom interaction serve to create the unequal speech exchange system and its distinct turn-taking organization (Markee 2000).

McHoul's (1978) characterization of the organization of classroom turn-taking has been criticized for the rather homogenous picture it paints of classroom interaction. The characterization is based solely on the instructional, teacher-led talk of content classrooms that follows the basic three-part instruction sequence (Tainio 2007: 34). It does not take into consideration, for example, language classrooms, where teachers employ activities that involve choral responses from the students in language drilling tasks (Markee 2000: 96). Such group allocations set an expectation for the whole class to respond in unison and to partake in practising the target language forms regardless of the multiparty setting of the classroom (see also Margutti 2004 for content classrooms). Moreover, the characterization does not take into consideration the range of 'classroom talks' (Markee & Kasper 2004) that can take place within and outside the classroom and their locally managed dynamically emergent turn-taking organizations (e.g. Seedhouse 2004; Thornborrow 2002; Jones & Thornborrow 2004). In addition to plenary talk, classroom interaction can consist of other types of tasks that involve group or individual work, or off-task discussions, and in these interactional contexts the turn-taking organization takes on other forms than the teacher mediated and managed turn ordering of plenary talk (Tainio 2007: 36–37; Seedhouse 2004). One more point of criticism levelled at McHoul's (1978) work is that it portrays the students' role in the organization of turn-taking as somewhat passive. Later CA studies on students' participation and conduct in the classroom have revealed that they can influence the structure and design of turn-taking, and especially the teachers' actions in managing social order (e.g. Candela 1998; Sahlström 1999). Below, I briefly address the second of these points of criticism in the following as it is highly relevant to how turns are allocated in different classroom contexts.

Although the turn-taking organization of the institutional interaction of classrooms is more formal and pre-allocated when compared to ordinary conversation, the picture that has emerged through the study of classroom turn-taking organization illuminates its permutable nature. This is particularly the case when one considers the different types of classroom activities, tasks or contexts in which the turn ordering and the enactment of speaker change is reflexively tied to the pedagogical focus as well as to the interactional work the participants collaboratively accomplish (e.g. Markee 2000, 2005, 2007; Thornborrow 2002; Jones & Thornborrow 2004; Mori 2004; Seedhouse 2004; Niemelä 2008; Mortensen under review, 2009). Several studies have illuminated

how both teachers and students disclose their awareness of the distinct classroom contexts in the different ways they jointly negotiate and manage speaker transfer in different contexts. For the present purposes, discussion of the studies by Seedhouse (2004) and Mortensen (under review, 2009) suffices to show how the organization of turn-taking varies and what it entails in terms of the participants' interactional work. The findings of these studies form an important basis for the present study, as they reveal the different ways in which the organization of turn-taking can be viewed.

Seedhouse (2004: 101–140) has shown that there is variation in the turn-taking organization in classroom interaction in different L2 classroom contexts. There is a reflexive relationship between interaction and pedagogy that participants display through their orientation to the dynamic organization of turn-taking in different contexts. The most rigid organization is in the form-and-accuracy context, in which the teacher is in strict control of the turn-taking process and decides who gets to speak and when (Seedhouse 2004: 102–106). The teacher also directs the nature of the students' answers: when is a student contribution appropriate vis-à-vis the question posed (see also McHoul 1978)? The other L2 classroom contexts, the meaning-and-fluency and task-oriented contexts, in contrast, exhibit less fixed turn ordering (Seedhouse 2004: 111–133). In these contexts, the students are able to participate actively in the turn-taking and self-select themselves as next speakers as their turns are not necessarily mediated by the teacher. In the case of task-oriented interaction, in particular, the students can jointly negotiate the turn-taking there and then in a manner which helps them to bring off the goals set for the task.

In contrast, Mortensen (under review, 2009) has looked at the turn-taking organization of Danish-as-a-second-language classrooms in terms of how distinct teacher instructions, i.e. first-pair parts, within diverging classroom tasks occasion varying interactional work from the participants. He has identified four types of teacher instructions, each of which sets particular types of expectations in terms of the students' interactional tasks, which in his case are the different forms of engagement and participation within the ongoing task (Mortensen under review). The instructions differ in the kind of activity initiated in the first-pair part and who is to be the next speaker to produce a relevant response to it. The instructions range from planned activities and pre-allocated turn ordering to unplanned activities that are constructed through locally negotiated turn-taking. One of the instruction types consists of a prepared activity (e.g. a text book exercise), in which the taking of turns and the selection of next speakers is locally managed moment-to-moment as interaction unfolds (Mortensen under review). According to Mortensen, in such activities it is the teacher's task to probe for a willing student to whom the response turn can be allocated. The students' task, on the other hand, is to display their willingness to respond, for instance by engaging in mutual gaze with the teacher (see also Sahlström 1999). In such instances, the next speaker selection and the recipient of the next turn are clearly identified. Another instruction type is concerned with locally managed activities where the turn-taking organization is also negotiated locally (Mortensen 2009). Such next speaker negotiation

sequences allow room for student self-selection, but they also occasion more interactional work from students in the establishment of recipiency and the next turn-at-talk.

But, whether locally managed or not, the organization of turn-taking and how participants negotiate speaker change essentially creates the premise for managing and establishing the nature of their participation. That is, the negotiation of turn-taking and the interactants' participation are interconnected in that a focused description of one calls for at least some kind of a consideration of the other. Most previous studies on classroom turn-taking have paid more attention to participation and only little to turn-taking practices in their own right (although cf. Sahlström 1999; Mortensen under review, 2009; Lehtimaja 2007). Such studies have shown how the participants collaborate to build a variety of participant roles for each other and for themselves without forgetting the institutional setting and the possible constraints it imposes on them. In different studies, participation has been examined from slightly different perspectives.

Sahlström (1999), for instance, has examined the interaction economy of classroom turn-taking organization and the participation expectations set for students by describing student hand-raising and self-selection practices. By interaction economy, he refers to "the organization of turn-taking as an economy whose organization affects that which it distributes, which in this case is participation" (Sahlström 1999: 87 following Sacks et al. 1974: 701). He has concluded that 'the Student' needs to display active recipiency and participation in the interaction through such measures as gazing towards and listening to the teacher (Sahlström 1999: 82–83; also Mortensen 2009). Yet, it is sufficient if an adequate number of students display their recipiency: not all of them need to demonstrate active participation by such means at all times. There are three different interaction positions that students are able to construct for themselves during plenary talk: "displayed participation in the plenary interaction; displayed non-participation while talking at one's desk, and displayed non-participation while being quiet and not a recipient at desk talk" (Sahlström 1999: 91). These collaboratively constructed interaction positions enable different participation possibilities for the students: while some students are competing for speaking turns, at the same time other students can display their non-recipiency. In terms of the organization of turn-taking, the classroom plenary interaction makes available different types of participation opportunities and interaction contexts available for individual students. How the actual taking of turns and active participation is carried in such instances through, for instance, hand-raising and self-selections (Sahlström 1999; see also Cekaite 2009; Mortensen 2009) are the focus of the next section.

If exploration of the locally managed turn-taking organization of classroom interaction brings out its dynamic nature in terms of student participation, a closer investigation of teacher turn-allocation practices is needed to find out how teachers orient to the ways in which they direct speakership in the classroom. Do they design their allocations differently when students display different orientation to the pre-allocated nature of the

classroom turn-taking organization? What kinds of turn-allocation devices teachers have been described as employing in prior research, and what new insights the present study has to offer the field are described below.

2.2.4 The establishment of next speakers in classroom interaction

In different research fields, classroom researchers have noted that the use of address terms, a student's name, and gaze directed towards the addressed recipient are ways of allocating turns to individual students (e.g. Mehan 1979; McHoul 1978; Leiwo et al. 1981; Hall 1998; van Lier 1994; Margutti 2004; Karvonen 2007; Mortensen under review). In addition, teachers can allocate turns to individual students by signalling the next speaker through different types of pointing gestures with different parts of the body (e.g. chin, arm, finger) (McHoul 1978: 201; van Lier 1994: 109; also Margutti 2004: 63). Head nods together with speech are also one way of nominating a next speaker in the classroom (Mehan 1979; Margutti 2004: 126–127). Despite the large number of studies, only few of them have more systematically examined how different turn-allocation devices are used to negotiate turn-taking or how they are fitted into their sequential context within the unfolding interaction. In the following, I will briefly introduce the studies that have characterized classroom turn-allocation practices in their own right (McHoul 1978; Mehan 1979; Mortensen under review, 2009). I will also discuss three studies that have centred on the construction of participation and, through identifying varying forms of participation, have illustrated how turn-taking is organized in the classroom (Sahlström 1999; Lehtimaja 2007; Niemelä 2008).

McHoul (1978) has examined the turn-constructional position of address terms in teacher initiations that simultaneously function as next speaker allocations. Mehan (1979), in contrast, has identified teacher-employed turn-allocation procedures for classroom interaction. McHoul has revealed that in different turn-constructional positions, the use of a student's name constructs distinct participation frameworks for the emerging interaction. For instance, in turn-initial position the address term explicitly marks that the turn is addressed to that student, whereas in turn-final position it leaves the addressed recipient open until the turn has come to completion. Mehan (1979: 84–95), in turn, has found that teachers allocate turns to students by individually nominating them, by explicitly inviting students to bid or by inviting them to produce choral responses. Both researchers have thus from different perspective shed light on the nature of turn-allocation practices in classroom interaction: McHoul from the turn-constructional perspective and Mehan from that of the turn-allocation machinery. Furthermore, both have primarily centred on describing the phenomena through talk.

Mortensen (under review, 2009), on the other hand, has examined both teachers' next speaker selections and students' self-selection practices in L2 classroom interaction. His approach is slightly different from those of McHoul and Mehan in that he describes how speaker change is locally negotiated and interactionally managed both in pre-planned activities (i.e. text book activities)

(Mortensen under review) and in activities that are locally managed (Mortensen 2009). His studies reveal how the negotiation of next speakers is a 'member's phenomenon' (Mortensen under review), and how both students and teachers influence the organization of turn-taking and the negotiation of next speakers. What he also shows is the way the participants' actions and their sequential organization are tightly bound to the participants' orientation towards the teaching materials being used, the tasks they perform with and through them, and how this orientation is actualized through their interaction of which the organization of turn-taking is part. He thus incorporates into his analysis the role the participants' embodied actions play in speaker selection. Mortensen's work is pioneering in that he describes classroom turn-taking practices in sequential detail. My study not only builds on and complements his work, but also takes a slightly different perspective on the organization of turn-taking in classroom interaction. For this reason, his findings will be discussed in more detail in the analysis.

In order for teachers to be able to nominate individual students as next speakers, students themselves need to bid for a response turn or otherwise display their availability as possible next speakers by, for instance, directing their gaze towards the teacher. In other words, students need to make visible their recipiency, i.e. participation, to the teacher in the ongoing talk and willingness to take the next turn. Students' bidding practices have been examined, for instance, by Sahlström (1999), Lehtimaja (2007) and Niemelä (2008), while students' recipiency through the use of gaze direction has been studied by Mortensen (under review, 2009).

Sahlström (1999: 93–101) has shown how students not only raise their hand to bid for a turn, but that they also direct their gaze and their face towards the teacher when they are bidding. Once a student has been nominated as the next speaker, the other students withdraw their raised hands and lower their gaze. Only one hand is used to bid for a turn (Sahlström 1999: 95). The raising of hands is strategically used by students to demonstrate their recipiency during plenary talk. It is also a means for them to invoke for themselves locally situated power that affects how the IRE is constructed and how speaker transfer is accomplished (Sahlström 1999: 99–101). Students, for instance, through raising their hands at a TRP or slightly before, which in the majority of cases they do, reveal that they are paying attention to the interactional sites where speaker transfer is made relevant and when potential speakership is made conditionally relevant for them. The timing of the raising of a hand by a student has importance to the ways in which teachers construct their initiations, as teachers do not generally select first bidders but tend to allocate turns to later bidders (Sahlström 1999: 101–107; cf. Niemelä 2008: 162–163). If students do not bid for a turn immediately, teachers are left to invite more bidders through different types of alterations and increments. In this way, the teacher's monopoly over constructing the organization of turn-taking described by McHoul (1978) is challenged, as students clearly are able to influence the way the organization of classroom interaction is structured (Sahlström 1999: 101).

Lehtimaja (2007) points out that bidding for a turn through raising one's hand in the classroom is a convenient way for several students to portray to the teacher that they most probably know the answer to the question asked and that they are actively participating in the instruction, although eventually only one student gets nominated. In comparison to Sahlström's findings, Lehtimaja (2007: 142) concludes that students' hand raising can occur in a variety of sequential places, other than in the near vicinity of a TRP or at a TRP (see also Niemelä 2008: 172). She has observed that when the class is carrying out routine-like tasks, students already begin raising their hands during the previous student turn, or when the teacher is, for instance, writing the answer down. Students also raise their hands during another student's response when they think that the student is providing a wrong response. As such, they display their online analysis of the other students' turns and also their orientation to and anticipation of what is interactionally relevant next.

Niemelä (2008), in contrast, has shown how students' hand-raising practices are contingent on the nature and direction of the teacher's gaze during teacher initiations. Her analysis reveals that when teachers direct their gaze towards the class collectively, students raise their hands to bid for a turn. Conversely, when teachers hold their gaze at one particular student, thereby marking the student as the addressee of the turn and the incipient next speaker, other students withhold raising their hands. In addition, in expanded sequences when a student has been nominated as the current speaker and the teacher continues to ask questions of that student, the teacher's gaze can be directed towards, for instance, the blackboard or other teaching materials. (Niemelä 2008: 157–174.)

What is essential for my study in the above-discussed three studies is the way they illustrate how both teachers' and students' small actions, such as gaze direction and hand-raises, and their timing show the jointly constructed nature of classroom interaction and the interactional work both parties are required to do in order to interactionally align themselves for the accomplishment of the task at hand (whatever that is). While none of them focus on the teachers' turn-allocation devices, the studies nevertheless show how important it is to consider students' bidding actions when examining the turn-taking organization of classroom interaction and how the actualization of different turn-allocation devices afford distinct participation opportunities for the students. It is also crucial to consider the ways in which turns are allocated to the whole class or through which students accomplish self-selection.

The above descriptions of teacher turn-allocation practices and student hand-raising practices concern the resources through the deployment of which individual students are nominated by teachers in classroom interaction. Occasionally, however, teachers allocate a next speaking turn to the student cohort; to the whole class. This creates distinct types of expectations for student participation and what is considered as a conditionally relevant response. The procedures for inviting a joint response from students have been explored by Lerner (1993, 1995) and Margutti (2004, 2006). They have both illustrated how teachers construct their elicitation or display questions through a number of

verbal and paralinguistic resources so as to invite choral responses from students. Lerner (1993, 1995) has observed L2 classroom interaction, while Margutti (2004, 2006) has analyzed Italian primary school lessons (L1 interaction). Both studies demonstrate how teachers guide their students' participation as well as their actions in the classroom through such turn design and turn-transfer practices. More importantly, these studies show that differently shaped teacher initiations provide differential opportunities for participation with particular turn types.

Students can also self-select themselves as next speakers (e.g. van Lier 1994; Sahlström 1999; Lehtimaja 2007; Mortensen 2009; Cekaite 2009). For instance, Sahlström (1999: 109–125) has found that self-selections are characteristically produced in or at a TRP. When produced by single students, they are ratified by teachers more often than several co-occurring self-selections (Sahlström 1999: 120). More importantly, self-selection seems to be a more effective way of gaining interactional power and soliciting a reaction from the teacher than hand-raising, because self-selection demands more interactional work from the teacher. Hand-raising is a silent act, during which the teacher can hold the floor until allocating a turn to a next speaker, whereas self-selections are audible and enter the teacher's turn space. This makes them difficult to ignore, albeit not impossible (Sahlström 1999: 121–122). Lehtimaja (2007), on the other hand, has observed how students utilize self-selection as a turn-allocation device, particularly in repair sequences.

Mortensen's (2009) study, in turn, illuminates how students' self-selections are constructed by initially creating a relevant participation framework with clearly identifiable roles of speaker and recipient before the self-initiated turn-at-talk is produced. More precisely, he has shown how students employ such resources as in-breaths and body movements in pre-turn position to not only establish relevant recipients for the upcoming turn, but also to display their incipient speakership. Such self-selections occur particularly in such sequential places, where the teachers' instructions, i.e. first-pair parts, do not identify the next speaker and where the primary recipient of the next turn is not predetermined by the instruction. What Mortensen (2009) underscores is the fact that the establishment of recipiency displayed through embodied actions is a crucial interactionally relevant task to be locally negotiated before the next speaker is able to produce the next turn-at-talk. It is only after the establishment of recipiency that talk can be produced: the talk emanates as a result of the nonverbally established participation framework (Mortensen 2009: 510).

In sections 2.2.3 and 2.2.4 I have tried to show how the turn-taking organization of classroom interaction differs from that of ordinary conversation and what kind of research has been carried out in the classroom context. The brief summary also shows how few classroom studies have investigated the ways in which teachers design their turn-allocations in and through the emerging interaction. Although quite a few studies have made references to such devices in passing, no systematic explorations of their use have been made. The present study is one attempt to fill this void by tracing the variety of embodied practices teachers employ in allocating next-turns to students.

An important aspect in the organization of interaction both in terms of the allocation of turns and the organization of repair is the shape of turns-at-talk and how they are produced to project divergent interactional tasks for next actions. The following section focuses on turn design from an embodied perspective, and at the same a shift in focus takes place as the section is not related to the organization of turn-taking. Instead it lays a foundation for understanding, on one hand, how embodied actions can be viewed as part of or as turn-allocation devices and, on the other hand, how the description of teacher repair practices is approached in the present study.

2.3 The design of sequentially organized turns-of-action

The design of turns-at-talk, i.e. how interactants construct their turns in order to perform social actions, is one of the interactional organizations at play in human interaction. In traditional CA, *social action* has then been the analytic phenomenon under investigation. It has generally been described as an utterance or a turn-at-talk composed either of a single turn-constructional unit or multiple turn-constructional units (e.g. Sacks et al. 1974; Schegloff 1996). These TCUs form the building blocks of the participants' turns. They can consist of sentential, clausal, phrasal or lexical elements and they can be of different length and size (Sacks et al. 1974). As was mentioned above, the construction of TCUs through such units helps project the possible completion point of a turn, and thus signal a TRP where speaker change can occur, but does not necessarily have to. The organization of turns is therefore closely tied to the organization of turn-taking. But the way turns are designed in the service of accomplishing particular social actions is also relevant in terms of the overall, coherent organization of actions into the larger activities of our daily lives.

The description of the TCU in terms of linguistic elements necessarily accentuates the role language, and consequently grammar, plays in the construction of turns-at-talk to the extent that the role of embodied actions as an intrinsic part of sense-making in interaction can easily be overlooked. However, research has shown that interactants exploit not only syntactic elements in constructing and deciphering when turns are complete and what their meaning is, but also prosodic and pragmatic features (Ford & Thompson 1996), a variety of embodied actions (e.g. Schegloff 1984; Kendon 1986, 1990; Olsher 2005; Carroll 2006; Streeck 2009) and the material and physical environment of the interactional event (e.g. Ford 1999; Goodwin 2000a, 2000b, 2003; Hindmarsh & Heath 2000; Heath & Hindmarsh 2002; Olsher 2003). An increasing number of studies have thus begun to take into consideration the various semiotic resources participants dynamically draw on as they shape their ongoing actions and project sequentially implicative next actions. They also pay attention to the ways in which the distinct semiotic resources used influence the meanings and interactional tasks produced through talk. It is this that I will focus on in the

present section by briefly discussing two issues related to talk and embodiment. The first concerns how the role of embodied actions in the description of turn-constructional units has been viewed in relation to talk. The second is related to projection-in-interaction: how embodied resources are employed to project different types of meanings and actions.

2.3.1 The relationship between talk and embodied resources in action construction

Although research on multimodal interaction has shown that talk and embodiment, along with other contextual, spatial, material, social and cultural features of interactional events, are drawn on by interactants to produce meanings in interaction, not many researchers have specifically addressed the relationship between talk and embodied actions in participants' turn-constructions (cf. Olsher 2005; Klippi 2006). More importantly, the co-operation of talk and embodiment is viewed slightly differently in distinct approaches within the study of nonverbal behaviour. I will now briefly outline how bodily conduct is viewed in relation to talk in two approaches that I think complement each other and help in understanding the analytic findings of this study. I will also suggest a new term that covers the use of embodiment in addition to linguistic elements in interactants' turn-constructions.

Embodied actions are generally regarded as included among the turn-constructional units of spoken utterances, or TCUs, in which case they are used to mediate distinct interactional meanings in the course of the incremental production of an utterance (Haakana 2001: 81; Schegloff 1996). In other words, interactants design their utterances so that "they use gesture and speech in partnership and shift the respective roles of gesture and speech in the utterance from one moment to the next in ways that seem rhetorically appropriate" (Kendon 2000: 61; see also Goodwin 2000a, 2003; Heath & Hindmarsh 2002). For instance, gestures can be used to signal that a particular lexical item will be at play in the construction of a turn's meaning before the item is actually produced verbally, thus foreshadowing its production (Schegloff 1984; Streeck 2009). Gaze can be used by a speaker as a resource for inviting recipients' co-participation in word searches (Goodwin & Goodwin 1986; Carroll 2006). Talk and embodiment thus co-operate in the construction of the meaning of an utterance to the extent that its recipients are able to interpret that meaning not only through talk but also through gesture, that is, on the basis of the whole package. But what is vital in describing the use of embodied actions relative to talk, as Heath (1992) and Streeck (2009) have observed, is their temporal position within the turn-construction and how that position is utilized to accomplish whatever social action is either being produced or foreshadowed. Charles Goodwin's (2000a, 2003) work has explicitly highlighted how participants reflexively exploit various semiotic resources so that they are temporally made relevant for the accomplishment of the ongoing activity, after which they are no longer paramount having been displaced by others more

important. That is, different semiotic resources are used momentarily to construct meanings in and through the emerging interaction.

In general, in multimodal interaction research, which, among others, the work of Goodwin (2000a, b, 2003) represents, interactants are seen to employ both talk and embodiment not only to produce social actions, but also to structure and manage the developing interaction. As such, research on the role of embodied actions in meaning-making takes into consideration their sequential and interactional relevance (e.g. Haddington 2005). In contrast, nonverbal research from a more psychological perspective has examined how, for instance, the role of gestures features in the propositional and pragmatic meaning of utterances in interaction, i.e. their semantic meaning (e.g. Kendon 2000: 54, also 1986, 2004). The various functions of gestures are then related to adding, complementing, supporting or making more precise the overall meaning of utterances. Such gestures can be autonomous elements in their own right, they can replace single items or more complex ideas, or they can manifest smaller and broader propositional meanings not conveyed through speech in conjunction with speech (Kendon 1986: 24, 2000). However, as Haddington (2005: 96) points out, the emphasis in such research lies on the speaker's "subjective expressions" rather than on their intersubjective construction.

In the present study, embodied actions are seen to be used in distinct combinations with talk and other semiotic resources or in their own right without talk to construct social actions. More importantly, participants will be shown to orient to the different resources as interactionally purposeful and sequentially implicative in terms of structuring interaction. Hence, they are also seen as essential in the establishment of intersubjectivity. But how have the different co-existent uses of talk and embodied actions been discussed and termed in the research literature?

Different stances seem to have been taken in relation to the role an embodied action, a gesture in most cases, plays in the turn-at-talk. In the pragmatic approach to gesture studies, Kendon (1995) has suggested that there are both substantive and pragmatic gestures. Substantive gestures are related to utterance content and the various meanings constructed through them. They are also more local in the sense that they provide contingent meanings in conjunction with the utterances produced. The discourse function of an utterance or its structure is the domain of pragmatic gestures. Such gestures are more conventionalized in their meaning potential and they carry a limited number of meanings in interaction (Kendon 1995). Enfield, Kita and de Ruiter (2007), in turn, have suggested that there are primary and secondary pragmatic functions for locational pointing gestures in interaction. Primary pointing gestures can function alone to indicate location without speech, whereas as I understand secondary points are used for more subtle purposes in the background of what is said, for instance, to help disambiguate utterance meaning (Enfield et al. 2007). The findings of Kendon (1995) and Enfield et al. (2007) offer interesting definitions for gestures and their role within speakers' utterances and their construction.

Within CA, in contrast, Klippi (2006: 159) has drawn attention to the fact that most CA research has explored the turn-constructional units of turns-at-talk through linguistic or prosodic features, but no definitions of how embodied actions figure in TCUs have been given (cf. Schegloff 1996 for a discussion on some of their role as potential grammatical features of TCUs). In her study on aphasic conversations, Klippi has suggested that participants utilize local and global gestures in interaction. Local gestures, for her, work simultaneously with speech to produce meanings in the local configuration of utterances. They can consist of different types of gestures (emblems, iconic, deictic) and head movements (shakes and nods). Global gestures, in contrast, function at the sequential level of interaction, in the organization of turn-taking and the allocation of turns. However, she does not specify whether the same gestures are used for both local and global functions. The distinction between the different orders of gestures clearly explicates that gestures are drawn on for, at least, two types of interactional purposes in the accomplishment of social interaction. In addition, they are dynamically made relevant as the utterance is progressively given shape. More importantly, Klippi (2006: 165) has called for a reconsideration of the definition of the turn-constructional unit as turns-at-talk not only comprise linguistic units, but of various non-vocal units.

In a recent study, Olsher (2005, also 2003) employed the term 'interactional move' to refer to turns-at-talk that are designed by drawing on talk and embodied and material resources. He has adopted the term from Goffman (1981), and defines it as "a unit of interaction that includes turns at talk, but is not limited to talk, in filling slots of sequentially organized interaction" (Olsher 2005: 223). Olsher's study deals with second language speakers' embodied completions, where an action is begun through talk, but completed with the help of an embodied action. Such multimodal action units he refers to as 'hybrid actions'. By defining the interactants' sequential actions through such terms, Olsher seeks to distinguish between what has generally been referred to as 'turns-at-talk' in CA and actions constructed through multimodal means (ibid.).

The decision by Olsher to focus on the interactional move that a turn within its sequential place accomplishes is one way of overcoming the terminological confusion concerning the TCU as a linguistic site alluded to by Klippi (2006). The definition necessitates a shift in focus from linguistic TCUs to social actions and how these are shaped and interpreted by speakers and recipients. It is a shift that in my opinion underscores CA's original research question of how social actions are accomplished as interactive, sequentially ordered phenomena; 'action' being the interactional frame through which human interaction is realized. But instead of adopting a term from another discipline or methodological framework to represent the complex multimodal turn-constructional units within interactants' actions, I want to suggest an alternative term to the interactional move coined by Goffman and adopted by Olsher that exploits CA's own internal terminology, that of a *turn-of-action*. I feel that it embraces both the fact that actions come in sequentially ordered, contingent turns, and that turns are performed in order to accomplish actions

that make up the activities of our everyday life, no matter how they are constructed and no matter how complex, local or global, the meanings they are used to convey. I have employed and will continue to employ the term systematically throughout the study whenever I discuss phenomena related to the multisemiotic construction of actions.

2.3.2 The projection of next actions through embodiment

At different levels of the organization of interaction, in terms both of sequential organization and of turn-constructional organization, interactants' actions are designed to project various interactionally relevant phenomena (e.g. Auer 2005). In effect, the way turns are shaped on the turn-constructional level serve to project whether a preferred or dispreferred next action is being produced (e.g. Schegloff 2007: 58–96; ten Have 1999: 120; Hutchby & Wooffit 1998: 45–47; Pomerantz 1984). Dausendschön-Gay and Krafft (2009: 249) point out that

> "[g]enerally speaking, there are two outcomes of projection that are highly relevant to the organization of interaction: Projection orients interlocutors' structural interpretation of small and of large portions of talk, and in doing so it is a method for announcing completion and for avoiding gaps and overlaps in turn taking; but it is also a method for restricting the range of possible next actions, for current and for next speakers."

The sequential organization of interaction can therefore be also said to include the sequential implicativeness of actions in terms of their preference organization. In this section, I will discuss how embodied actions figure in the interactional work of projecting next actions, in 'action projection' (Schegloff 1980). I will do this by looking at, first of all, adjacency pairs and their preferential organization. That is, how second-pair parts are constructed to project their dispreferredness in contrast to preferred second-pair parts. That turn design reflects the emergence of a dispreferred action is crucial in understanding the role of repair and the establishment of intersubjectivity in interaction (e.g. Sacks et al. 1977). Second, I will briefly look at how the scene for next actions is prepared through bodily conduct while current turns are still being produced.

With respect to producing preferred actions, prior research has shown that preferred second-pair parts are generally produced immediately and in a straightforward manner after the first-pair part (see e.g. Schegloff 2007: 63–73; Pomerantz 1984). For instance, Pomerantz (1984: 69–70) has shown that in assessment sequences in everyday interaction, preferred second assessments are produced with little or no gap at all after the first assessment. By producing the second assessment directly, the co-participant displays strong alignment with the speaker's action, thus furthering intersubjectivity and social solidarity. In classroom interaction, teachers' preferred third turn actions, i.e. positive evaluations, are shaped similarly in that they are produced directly after the student response has been delivered (Macbeth 2000: 39).

Dispreferred turns-at-talk, in contrast, exhibit a variety of features that serve to mark them as dispreferred. One of the features is that the production of a dispreferred turn is temporally delayed; there is a gap of silence between the adjacency pair that creates an observable break in the interaction (Schegloff 2007: 67–68). For ordinary conversations, it has been noted that one beat of silence is an unmarked feature of a regular transition space, while longer silences are marked indicating that a dispreferred action is being produced (Schegloff 2007: 67). The turn-initial positions of dispreferred responses also feature various hedging or delaying devices, such as discourse markers, that postpone the actual production of the response (Schegloff 2007: 68). In similar vein, they can also be constructed to include different types of accounts or excuses as to why the respondent is not affiliating with the speaker's first-pair part (Schegloff 2007: 68–69) or clarification requests and repair initiators on the first-pair part (Pomerantz 1984: 70). These devices further delay the production of the actual response. Generally, preferred actions do not involve the use of accounts or explanations. Yet another feature is that in quite many dispreferred responses, the turns additionally include diverse modifying or mitigating elements that are employed to render the responsive action as indirect (Schegloff 2007: 64–65). All these interactional resources serve in the negotiation of intersubjectivity and of social solidarity: they are shaped in consideration of the face of the turn's recipient (see recipient design, Sacks et al. 1974: 727) and of the disalignment featured through them.

Notably all the interactional devices summarized above in the accomplishment of preferred/dispreferred actions are to do with speech and how it is organized within turns-at-talk. But how are embodied actions employed in the enactment of affiliating and disaffiliating actions? For instance, Haddington (2006) and Heath (1992) have examined how embodied actions are employed to structure participation and interaction with respect to preference organization. Haddington (2006) has illustrated how in stance-taking sequences recipients employ a cut-off gaze to indicate their disaffiliation with the current speaker's first assessment. Before cut-off, the recipient's gaze has been focused on the speaker, but either during the production or after the completion of the speaker's assessing TCU, the recipient's gaze shifts away from the speaker. The shift occurs before a verbal disagreement is performed, thereby projecting the recipient's disaffiliating stance (Haddington 2006: 320).

Heath (1992), on the other hand, has demonstrated how speakers' head nods and other gestures during the production of an utterance solicit co-participation from the recipient to the extent that the recipient performs a reciprocal gesture, which is temporally adjoined with that of the speaker's. Interestingly, he has shown how the speaker's gesture not only invites a display of co-participation from the recipient, but it also elicits a particular type of treatment of the speaker's turn-at-talk once it reaches its completion (Heath 1992: 103–108). That is, the recipient is invited to manifest an affiliate stance towards the action at hand through embodied means, and at the same time to foreshadow the manner in which the speaker's activity is to be responded to in the pending turn. If such affiliate gestural displays are not produced or are only

minimally produced by the recipient, Heath (1992: 111) argues that this projects a disaffiliated response with respect to the speaker's current action and its preferred projected action. Such embodied actions as part of the contextualization of an utterance, and the action it accomplishes, have sequential implications in terms of preference as they have an import for the manner in which participation is dynamically shaped.

What Heath's findings relate to is the concept of the 'projection space' introduced by Schegloff (1984). In terms of turn-constructional units, it "is concerned with both the span in which some element of talk is "in play" before being produced, and with the evidence of that which a speaker's turn may make available to its recipient" (Schegloff 1984: 267). In the study, Schegloff reported on his finding that during the delivery of an utterance different types of gestures (e.g. iconic or locational) serve to project an emerging lexical item before its actual production in such a way that the gesture is completed before the lexical affiliate is delivered. More importantly, such gestures can carry over one TCU into another until the lexical affiliate occurs, thereby maintaining its continued relevance. Interestingly then, Schegloff has shown that the temporal construction of a gesture serves to frame the possible size of the projection space thus initiated, and this space varies according to the interactional purpose of the gesture. The kind of projection Schegloff discusses is a form of lexical projection, as stated by Streeck (2009: 163). Streeck (ibid.) has pointed out that gestures are also utilized to project pending actions in the form of pre-indication of the nature of the incipient action. It is this kind of embodied action projection which seems to be the case in Heath's (1992) and Haddington's (2006) studies. However, the *embodied projection*, as I prefer to call it, is carried out by the recipient of the current turn in that the recipient foreshadows a particular action through a display of co-participation in the form of affiliating or disaffiliating gesturing (Heath 1992).

Other research on projection-in-interaction has shown the various entraining functions gesturing enables at different turn-constructional positions (Streeck 2009) and the preparatory nature of embodied actions in establishing next actions for specific activities accomplished in particular settings (Dausendschön-Gay & Krafft 2009). Dausendschön-Gay and Krafft (2009) have shown how the activity of a sales interaction at a butcher's stall is prepared through the interplay of different semiotic resources, such as the sales assistant's and the customer's gaze trajectories to one another, to other customers and to the meat display as well as the sales assistant's body movements and posture vis-à-vis the customer and the necessary tools of the setting (e.g. the counter). The participants are shown to create a participation framework through these means that, first of all, displays their availability for the transaction, and secondly, prepares them for the necessary actions at hand, the ordering, preparation and buying of a product. More importantly, the various resources are sequentially organized to reveal the stage the participants are at in the establishment of the participation framework as well as of the overall sales interaction. Mutual gaze is essential in informing the customer that the sales assistant is available for the activity, thus signalling the 'go ahead' for

the customer, before any verbal means are used. Additionally, it is the sales assistant who structures subsequent orders by signalling to the customer at what point he is ready to take another order, if there is to be one. Such actions manifest the habitual character of the interaction and its co-operative nature in addition to the fact that the participants' visibly orient to them as resources to prepare and gradually move the interaction forward from one part of the activity to another. Dausendschön-Gay and Krafft (2009: 266) point out that "[t]he organization of simultaneous activity and sequentiality is a permanent interactive task for the participants" in this workplace interaction. That is, as participants do preparation work in order to make themselves available and orient to the relevant next actions in the interaction, they accomplish the work through different semiotic resources, both embodiment and talk, so that they overlap.

In general it appears that although it has not been very much underlined in CA research so far, projection-in-interaction from an embodied perspective manifests the simultaneous, overlapping feature of sequentially organized actions that occurs in various forms and in different interactional settings. It is made possible by the fact that social actions are produced through the interrelatedness of talk, embodiment and other resources, the different modalities being exploited for distinct interactional purposes. The analysis of teacher turn-allocations and repair practices will shed more light on the nature of projection-in-interaction and the role of embodied resources in overlapping, sequential actions.

3 THE ORGANIZATION OF REPAIR IN TALK-IN-INTERACTION

The organization of repair is an endogenous interactional resource for interactants in their efforts to solve problems of speaking, hearing, and understanding. Moreover, it is the interactional resource for interactants to establish and display mutual understanding of what is taking place at a particular moment in interaction and to solve possible troubles that occur. The organization of repair through sequentially organized turns-of-action is, therefore, essentially the means by which interlocutors defend and achieve intersubjectivity (Heritage 1984: 254–260; Schegloff 1992). While trying to achieve intersubjectivity, interactants are also attentive to the preferential implications of repair and its normative nature (Schegloff et al. 1977). For this reason, interactants pay attention to how repair is initiated and how repair-related actions are designed to maintain social solidarity between them (Heritage 1984; Goffman 1981).

What characterizes repair and how repair can be carried out by interactants is outlined in the present chapter. In general, repair is a widely studied phenomenon both in everyday conversation and in institutional interaction. After the seminal paper by Schegloff, Jefferson and Sacks (1977), a great number of researchers have investigated repair in different settings and contexts and how repair is used in the settings. Currently, there is a plethora of CA studies focusing on repair in talk-in-interaction with different types of participation configurations ranging from first language (L1) speaker interactions (e.g. Schegloff 1979, 1992, 1997a, b, 2000; Jefferson 1987; Drew 1981, 1997) to conversations between L1 and second language (L2) speakers or between L2 speakers (e.g. Gardner & Wagner 2005; Carroll 2006; Kurhila 2003), and to interaction between professionals and lay persons in various pedagogical and institutional situations (e.g. Kasper 1986; McHoul 1990; van Lier 1994; Seedhouse 1996, 2001, 2004; Koshik 2002; Macbeth 2004; Tykkyläinen 2005). On the whole, the above studies on repair can be characterized by their focus on the role of grammar in repair actions, on the various kinds of repair

actions, trajectories and devices that interactants use, and on the interactants' roles, rights and constraints in carrying out repair.

Primarily the study of repair has focused on the organization of repair as a form of talk-in-interaction, where talk and the verbal turn-constructional characteristics have constituted the loci of interest. Little systematic examination of embodied actions in repair work was published before the turn of the millennium, although some observations on it were made within CA (e.g. Goodwin 1981; Schegloff 1984; Goodwin & Goodwin 1986; Streeck 1993, 1995; Wootton 1994). Recently, as research on social interaction in general has leaned increasingly towards the study of multimodal practices, the research on repair has followed the same trend. Since the turn of the century an interest in repair operations through other communicative resources as participants' means to perform their social and cultural practices has emerged (see e.g. Goodwin 2000a, b, 2003; Martin 2004; Mori 2005; Olsher 2005, 2008; Tykkyläinen 2005; Carroll 2006; Klippi 2006). Today there are a number of ongoing projects focusing on how interactants employ semiotic resources in conducting repair in distinct settings for the purpose of establishing shared understanding of their locally situated actions (e.g. Haddington & Keisanen 2009; Haddington forthcoming).

Consequently most of the studies referred to in the present chapter have their basis in talk and how it is used to organize repair on the sequential and turn-constructional level of interaction. Hence, the approach taken towards recapitulating prior research differs from that in chapter 2 insofar as the different semiotic resources, mainly talk and embodied actions, used in carrying out repair are reported on separately. By outlining the essential findings of previous repair studies, the present chapter lays a foundation to understanding how the phenomenon of repair has been approached in the past and how the present study builds on that foundation. Little by little, as the picture on the role of repair in interaction becomes more elaborate, the chapter will clarify the import of the present study for the field of interactional repair – for classroom interaction in particular and for ordinary conversation in general.

The chapter is divided into four sections. First, I briefly outline the findings of Schegloff et al. (1977) as their study has been, and continues to be 30 years later, the corner stone and yardstick for later studies on repair (section 3.1). This also involves discussion of the role of preference organization in repair work (section 3.1.1) and how the relationship between repair and correction is viewed (section 3.1.2). In section 3.2 I selectively summarize studies conducted on repair in a variety of classroom settings: content, L2 and CLIL classroom environments. The section is divided into three sub-sections that deal with the main topics addressed in the reported studies: the relationship between repair and correction (3.2.1), the repair trajectories (3.2.2) and the preference organization of repair in classroom interaction (3.2.3). One section is devoted to a discussion of the instructional, three-part activity sequence of IRE in classroom interaction. The section reports how repair has generally been initiated or performed in and through the third turn of the sequence, when it has been approached from the point of view of turns-at-talk (section 3.3). The final section (3.4) introduces some of the principal studies that

have described the role of other semiotic resources in addition to talk in constructing repair. It provides a summary of both ordinary and institutional interactions as well as classroom interaction.

3.1 Repair in everyday conversations

In their characterization of the organization of repair, Schegloff, Jefferson and Sacks (1977) viewed repair as involving any problems to do with hearing, speaking or understanding the ongoing talk that resulted in engendering mutual understanding, the intersubjectivity of the talk. To that end, when repair is initiated, it suspends the emerging talk and introduces a side sequence into the primary activity framework until the trouble is dealt with, at which point the participants resume the original activity (see also Schegloff et al. 2002). In general, any third action in a sequence of actions is the sequential place in and through which interactants display to one another their shared understanding of the emerging interaction (Heritage 1984: 256–260). It is the sequential site for possible repair actions to be taken with respect to any misunderstandings that second actions might portray relative to any first action produced (Heritage 1984: 258). That is, if a recipient has misunderstood the action a speaker's first-pair part accomplishes, the misunderstanding is revealed via the recipient's second-pair part, after which the speaker of the first-pair part can initiate repair in the third turn after the recipient's turn. According to Schegloff et al. (1977: 363), practically everything can be included in the domain of repair if it can be repaired, even in the absence of any detectable errors or troubles as such in the talk. Accordingly, they termed the problem the repair addresses the 'trouble source' or the 'repairable'.

3.1.1 The basic repair apparatus and the role of preference organization

The repair organization Schegloff, Jefferson and Sacks (1977) have described comprises four repair trajectories that are manifested in interaction. These are i) self-initiated self-completed, ii) self-initiated other-completed, iii) other-initiated self-completed, and iv) other-initiated other-completed repairs. What is particular about these patterns is their sensitivity to the trouble source and its place of occurrence with regards to the initiation of the repair. Thus, the four repair trajectories differ from one another on the basis of who does the repair (self or other) and of the sequential place in which repair is initiated. Repair can be initiated either by the current speaker or by a recipient; similarly it can be completed by the current speaker or by a recipient.

The realization of the distinct repair trajectories is essentially linked to the relationship between the preference organization and the maintenance of social solidarity; the issue of face as discussed by Goffman (1981). Therefore an important feature of the organization of repair is the organizational relatedness

of self- and other-initiated repair, which lead Schegloff, Jefferson and Sacks (1977) to proclaim that there is a built-in organizational preference for self-correction over other-correction. What this ultimately relates to is that an opportunity is given for the current speaker to both self-initiate and self-repair before other-initiations are launched. There are three sequential positions, in which the current speaker is given the opportunity to self-initiate. These three self-initiation positions are during the speaker's current turn before its completion, during the TRP and during extended turn transition repair slots before the next turn (such as a pause or a gap) (Schegloff et al. 1977: 372–375). It is only when the current speaker has not taken the opportunity to initiate repair that other-initiation is employed. Even then other-initiations are withheld to the extent that a space for an opportunity to self-initiate is provided for the current speaker beyond the current TCU. More importantly, the self is given the opportunity to self-repair after an other-initiation, thus further enabling the negotiation of intersubjectivity and solidarity. It can also be the case that none of the 'repair-initiation opportunity spaces' (Schegloff et al. 1977: 374–375) – neither self nor other – are taken to initiate repair, in which case the repairable is not repaired.

While self-initiated self-completed repair is the preferred and the most used repair pattern in mundane conversation, other-corrections are not. However, Schegloff et al. (1977: 381) concur that in special type of interactions where one of the participants is still learning to become competent in some area of life/expertise, other-correction as an instructional asset is more frequently used until sufficient competence is achieved – compare, for example, teacher-student and parent-child interaction.[14] This will be brought up for closer discussion in the next section. In chapter 6, it will be shown that the teachers in my data habitually carry out corrections which are not necessarily related to the asymmetrical epistemic position of the participants per se. Rather they are related to the locally emergent situational and organizational exigencies of the instructional activity and the way it is initially structured according to the tripartite pedagogical sequence of IRE.

According to Schegloff et al. (1977: 367), the techniques to initiate repair vary according to the placement of the trouble source and the repair pattern taken. Without going too deeply into the possible repair constructions, initiation for self-repair can be indicated, for example, by cut-offs and sound stretches – i.e. non-lexical elements (ibid. 376; see also Schegloff 1979), while other-initiations can be constructed through various means, for example, by using question words or by repeating part of the trouble source turn or the repairable item itself (Schegloff et al. 1977: 367–368; see also Schegloff 1997b; Drew 1997). The difference between self-initiated and other-initiated repairs is that the former, instead of pinpointing the location of the trouble source, usually leads to a candidate repair by the current speaker directly, whereas with the latter the repairable is being located in the trouble turn by the recipient

[14] This anecdotal observation has received some attention in later works on repair in classroom interaction (McHoul 1990; Macbeth 2004).

and the resolution of repair is left to the speaker of the trouble turn (Schegloff et al. 1977: 376–377; also Drew 1997). Of other-corrections Schegloff et al. (1977: 378–381) state that their forms are in general sensitive to the situational variables of the emerging interaction, and can thus be constructed as jokes, clarification requests/understanding checks or by indicating hesitancy through different types of uncertainty markers. These forms help construct other-initiations as dispreferred turns-at-talk and build a space for performing 'unmodulated other-corrections' (Schegloff et al. 1977: 379). It is nevertheless pointed out that the different repair trajectories accomplish repair for similar types of repairables, whether these are word replacements, person references or next speaker selections (Schegloff et al. 1977: 370–372). There are no specific repair trajectories for particular repair types in mundane conversation (cf. CLIL classroom interaction, Dalton-Puffer 2007).

In later works, Schegloff (1979, 1992, 1997a, b, 2000) has explicated a number of issues related to conversational repair, thus deepening our understanding of the arguments of the seminal paper. The issues pertain to the relationship of repair and the turn-constructional progress of sentences from the perspective of syntax (1979), to the self-initiated repair positions that are possible and their sequential characteristics (1997b), and to the other-initiated repair positions that are possible and their sequential occurrences (1992, 2000). He has also brought to the fore the fact that not all repair initiators function merely as repair initiators due to their form (Schegloff 1997a; cf. Drew 1997). Whatever action a turn is accomplishing its meaning becomes understood in relation to its sequential position in an activity sequence as well as its interpretation by the participants (see also Goodwin 2000b, 2003), not only on the basis of its construct. All in all, Schegloff has not only provided crucial tools and methods for the analysis of talk-in-interaction, but he has also produced a profound description of the different conversational environments in which particular repairs are performed and their sequential implicativeness and interactional import vis-à-vis the ongoing interactional task.

The present section has described how the organization of repair is related to mundane conversation and its interactional organization. The description of the basic repair phenomena has, it is hoped, laid a sufficient foundation for understanding how repair work in the institutional setting of classrooms differs from that of everyday talk. However, a brief discussion of the relationship between repair and correction is merited as understanding how it is viewed in everyday talk helps appreciate how it is approached in instructional interaction.

3.1.2 The relationship between repair and correction

For Schegloff et al. (1977), the term 'correction' is one subtype of repair that deals with replacing an erroneous item in speech with the correct one. 'Repair' is then the more general term for handling any type of problem occurrences in talk-in-interaction (ibid.). However, there is a difference between repair and correction that is concerned with the temporal occurrence of the repairable in relation to the production of utterances. Correction generally addresses already

produced trouble sources, i.e. it is retrospective, whereas some repairables are marked as yet emerging and impending, in which case the repair is prospectively oriented to (see e.g. Streeck 1995: 93; Schegloff 1979). Yet some repairs are also retrospective in that they do not entail correction in its fundamental sense. Same-turn self-repair is a repair device that can be both retrospective and prospective without entailing correction (Schegloff 1979).[15]

Jefferson (1987), for instance, has examined other-corrections in mundane talk and has defined 'correction' as involving those instances of talk, where next speakers retrospectively correct the current speaker's incorrect talk, competence or action. In such cases, the corrections are always initiated by the next speaker in the next turn and the correction device can take two forms: the corrections can be either exposed or embedded. While exposed correction disrupts the unfolding interchange and becomes the interactional task of the moment, thus momentarily bringing the repair activity to the fore, embedded correction is conducted as part of the ongoing talk without the correction surfacing as a topic on its own (Jefferson 1987).

By and large, repair is an action (or actions) that can, and often does, cause delay in carrying out a sequentially relevant next action – i.e. it is postponed until the repair work is accomplished (Schegloff 2000: 208–209; see also 1997a; Schegloff et al. 2002). When considering repair from this perspective, it is clear that repair work disrupts the fluent development of the ongoing interaction and is not always in one-to-one relationship with correction. In terms of pedagogical interaction, there is, according to Schegloff et al. (2002: 7–8), another order of correction organization that does not necessarily have anything to do with repair. It has to do with the endogenous nature of classroom interaction as an interactional site where the negotiation and construction of correction is a crucial part of the teaching and learning process (see also Macbeth 2004; Hall 2007; Dalton-Puffer 2007). The activities and tasks in the classroom are goal-oriented, and therefore, dealing with different types of trouble in understanding and producing talk are a natural part of the interaction, not a side sequence to be resolved, after which the main action is restored. The present study mostly deals with different types of instructional corrections, more or less exposed, which are not disruptive for the ongoing interaction. Rather they are seen as a contingent part of teachers' and students' context-specific instructional actions, which guide them towards the successful accomplishment of their pedagogical and activity-related goals.

How the relationship between repair and correction in everyday interaction has been viewed therefore seems to have a bearing on the way the relationship is viewed in pedagogical interaction. What is crucial in understanding prior CA-based research on repair in classroom interaction is that it has often been grounded on the work and findings of Schegloff et al. (1977), which has lead to comparative analysis between ordinary and institutional varieties of talk. According to Hall (2007), this has engendered a

[15] The same phenomenon has been referred to as backwards-oriented and forward-oriented repair (Schegloff 1979; see also Carroll 2006).

somewhat misconstrued conception of the practices of repair and correction in classroom interaction. Therefore, the studies conducted in content, L2 and CLIL classrooms show different types of issues on repair and correction compared to those that arise in conversational repair. This is the topic of the next section.

3.2 Repair and correction in classroom interaction

In classroom interaction, the organization of repair, and correction, has been widely examined in content (L1), second/foreign language (L2) and CLIL classrooms from a variety of theoretical and methodological perspectives. In L2 classroom studies, and in some CLIL studies, the focus on repair has fundamentally reflected the primary goal of the setting, the acquisition of the second language. The crucial difference between CA research and traditional second language acquisition (SLA) studies on repair, according to Dalton-Puffer (2007: 205–208), is in their orientation. SLA research has tended to look at the effects of feedback and error/correction on the learners' acquisition of the target language and what kinds of comprehensible input they are given. CA research, in contrast, focuses primarily on the interaction between the participants, and thus approaches repair from a more reciprocal, interactional perspective. For the purposes of the present study, only studies that have adopted a CA approach to observing repair and correction in classrooms are considered, as the primary interest lies in describing how repair work is accomplished in classroom interaction from a multisemiotic perspective, not in how repair influences learning.[16]

In general, CA research on repair in classroom interaction has addressed three types of phenomena. These are 1) the relationship between repair and correction, 2) the various repair trajectories and classroom contexts, and 3) the preference organization of repair in different classroom contexts. The repairable items have also been shown to relate to various characteristics of instructional discourse: to problems of speaking and understanding and to errors of academic and linguistic production. In L2 and CLIL classrooms, especially, the dual role of the second language, i.e. it is both the medium and the subject of study, gives rise to an additional repairable feature: the language and its correct usage. Next, each of the three phenomena will be described separately. By taking this approach to reviewing the prior research, I wish to emphasize that the phenomenon of repair in the pedagogical context of classrooms is a complex matter of which much more remains to be examined and discussed, particularly in relation to conversational repair (cf. Schegloff et al 2002: 8). It is also

[16] Other approaches, especially traditional SLA studies, and their findings vis-à-vis repair/correction research have been described at length elsewhere (see e.g. Chaudron 1988; van Lier 1994; Seedhouse 2004; Lyster 1998; to some extent see also Hall 2007).

acknowledged that the three phenomena are intertwined and overlapping, and ultimately cannot be examined in isolation from each other.

3.2.1 The relationship between conversational repair and instructional correction

The relationship between repair and correction seems to have been addressed from two perspectives in classroom interaction research. The first of these has focused on describing the relationship between repair and correction practices in classroom interaction and comparing them with the practices of ordinary conversation as identified by Schegloff et al. (1977) (McHoul 1990; Macbeth 2004). The second has specifically problematized the difference between everyday, conversational repair and instructional correction and their organizational and pedagogical role in classroom interaction (Macbeth 2004; Seedhouse 2004; Hall 2007; to some extent see also van Lier 1994; Koshik 2002). The difference between the two perspectives is in that the former has focused on the empirical practices of repair, whereas the latter has centred on the theoretical and methodological approaches to repair and their conceptualization. In the following, I will first briefly describe McHoul's (1990) study on correction in classroom interaction, and Macbeth's (2004) response to it. I will then cursorily characterize the criticisms that have been levelled at adopting a conversational view of repair in the pedagogical context of the classroom. At the end of the section, I will clarify my stance on these issues.

McHoul (1990) in his study on the organization of repair in content classroom interaction has noted that the prevalent repair trajectory is other-initiated self-correction, i.e. teacher initiates repair and students complete it. Teachers have the prerogative to initiate repair, while students are allowed to repair themselves (either through same-turn self-corrections or teacher-initiated self-corrections). According to McHoul, the nature of the three-part IRE sequence provides teachers with the possibility to initiate repair in the third turn of the sequence, the evaluation turn, and thus utilize it to help students find correct answers and produce self-corrections. This characteristic feature of the third turn also makes possible the recursive use of the IRE sequence, as it can be expanded to constitute several sequences through several repair re-initiations, for instance, in the form of cluing. This recursive feature defers teacher-initiated other-correction, whereby teachers perform other-repair directly on the students' answers. In other words, there is a preference for student self-corrections in classroom talk that is manifested through the withholding of teacher accomplished other-corrections. A space for student self-corrections is provided before other-corrections are employed. This is further emphasized by the fact that the shape of both other-initiations and other-corrections takes a modulated character in McHoul's data (1990: 367). However, other-initiations are issued by teachers immediately after the student answer turn has come to completion point (McHoul 1990: 362).

On the whole, McHoul's (1990) findings suggest that classroom interaction has a different preference order in terms of repair trajectories when compared

to ordinary conversation (see also Tainio 2007: 47–48). First of all, according to McHoul (1990), although there is a preference for self-repair in both settings, the way it is actualized in them differs. In ordinary conversation, the opportunity to self-repair is given by withholding the start of the other-initiation, which provides an opportunity for the speaker of the trouble source to take repair action. In classroom interaction, teacher-issued other-initiation is performed immediately after the student turn, thereby preventing the speaker of the trouble source taking action to solve the problem before a problem is explicitly indicated by the teacher. The teacher and students are thus shown to have different participatory rights in terms of initiating and carrying out repair. Secondly, the claim made by Schegloff et al. (1977) that other-corrections are more predominant in particular types of expert-novice interaction situations is in opposition with the predominance of other-initiated self-corrections McHoul has found for classroom interaction. Although McHoul (1990: 367) only briefly ponders why this is the case, it can be argued that it has to do with classroom interaction as an interactional site where students are afforded different types of learning opportunities, and pedagogically such repair trajectories create space for students themselves to revise their answers. That is, they are not given correct answers by the teacher, but they are encouraged to find them themselves (McHoul 1990: 376). More importantly, McHoul (1990: 374) basically argues that when teachers initiate repair in the next turn after the trouble source, the phenomenon in question is correction, not repair in the sense of Schegloff et al. (1977). The students' answers contain an error, and this error needs to be replaced by the correct item. According to him, it is not only other-initiated corrections that involve correction, but self-initiated self-corrections are designed to correct as well.

It is all this that Macbeth (2004) addresses in his account of the relationship between repair and correction in everyday and institutional interaction, and argues that in his view McHoul (1990) has managed to reverse the preference structure of Schegloff et al. (1977) in the analysis of classroom correction. This has led McHoul to come to inherently distorted conclusions vis-à-vis the findings of Schegloff et al. (1977). What Macbeth (2004) suggests is another take on the issue. For him, repair and correction are two "co-operating organizations" (Macbeth 2004) that can be at work at the same time, at best in the same unfolding activity sequence. Classroom correction is concerned with correcting students' errors and inadequate replies as they are locally produced and understood to be such; repair in classrooms is a matter of establishing shared understanding, achieving intersubjectivity, of what is taking place in similar way as in ordinary conversation. Macbeth shows that teachers and students display a clear orientation to the different orders of repair and correction when carrying out their classroom-related actions. He also stresses the point that when the two are co-operating in the same sequence "problems of understanding will find their completion first before initiations of correction can find theirs" (Macbeth 2004: 729).

In addition to Macbeth (2004), Koshik (2002), Hall (2007) and Seedhouse (2007b) have problematized the fundamental essence of repair practices in

classroom interaction in relation to conversational repair: they have not only taken a stand towards the terminological standing of Schegloff et al. (1977), but also a more in-depth approach to the operationalization of the interactive task of repair. Hall (2007), basing her argument on a broad range of classroom studies, heavily criticizes prior classroom repair research for adopting and transferring the terminology and organizational features of traditional CA repair into classroom interaction. Consequently, she scrutinizes several individual studies and argues that they have conflated both analytically and conceptually the repair phenomena that occur in them, despite the fact that conversational and instructional repair work are carried out for different purposes. Conversational repair pertains to problems of understanding and hearing, to possible loss of intersubjectivity, and thus generates an insertion sequence within the primary activity framework until the trouble is resolved, whereas instructional correction is an essential part of the activities carried out in the classroom in and through the instructional sequence. That is to say, the correctional practices of pedagogical situations do not create a side sequence after which the instruction is resumed (see also Schegloff et al. 2002: 7–8; Dalton-Puffer 2007). Rather the work of instruction, of which corrections constitute an integral part, is accomplished through the IRF sequence. Terminologically, Hall explicitly differentiates the two practices and refers to them as conversational repair/correction and instructional correction.[17] Like Macbeth (2004), Hall (2007) concedes that both conversational repair and instructional correction can occur in classroom interaction, but it is important to differentiate when they are at operation.

In his response to Hall (2007), Seedhouse (2007b) criticizes the claims made by her, as well as the larger population of researchers who have misunderstood the basic tenets of traditional CA, as fundamentally being a fault of her own conflation and misconception of ethnomethodological CA and linguistic CA. For him, the two perspectives differ crucially from each other in that the former adopts an emic approach into the analysis of data, while the latter imposes an etic analysis on the data. Therefore, the phenomenon of repair, its context-free character, needs to be considered from the point of view of how the participants orient to it and employ it as an interactional resource in a pedagogical setting in context-sensitive ways (see also Koshik 2002), and not as a form of predetermined coding scheme applied to the analysis of IRE sequences. What Seedhouse (2007b) basically argues is that it is unnecessary to conceptually define and differentiate the repair practices that occur in classroom interaction from, for instance, ordinary conversation as they are performed to deal with similar kinds of trouble: problems of speaking, understanding and hearing. Essentially he calls for a description of classroom practices that conveys the complexity and sensitiveness of the teachers' actions

[17] Van Lier (1994: 188) draws the same kind of distinction between conversational repair and didactic repair. According to him, the two kinds of repair are employed in different activity types, and therefore do not take place at the same time (van Lier 1994: 189).

instead of providing a simple and unidimensional characterization of them (see also Lee 2007, 2008).

In my opinion both Hall (2007) and Seedhouse (2007b) present valid arguments for examining classroom repair through a more concentrated conceptual and analytical framework. While Hall promotes conceptual clarity in terms of instructional versus conversational actions, Seedhouse advocates methodological clarity that is accompanied by a dynamic conceptual frame applicable from one setting to another without unnecessary neologisms. In the present study, the methodological perspective on analysing classroom repair practices is the same as adopted and advocated by Seedhouse (2004, 2007b), that is, ethnomethodological CA. Thus, the terminology with regards to repair is that of CA, and thus analytic observations are emic in nature. Similarly, following Hall (2007), Schegloff et al. (2002) and Macbeth (2004) different types of problems and issues related to understanding, explaining and resolving matters in the accomplishment of classroom activities are considered as endogenous to the instructional interaction that occurs in classrooms, not suspensions of it.

3.2.2 Repair trajectories, types of repairables and diverging contexts

In many of the CA-based L2 or CLIL studies, the focus of analysis has been on the repair mechanisms and trajectories, on the types of errors repaired and the kinds of interactional contexts, where particular kinds of repairs occur (Kasper 1986; van Lier 1994; Jung 1999; Seedhouse 2004; Dalton-Puffer 2007; Smit 2007). The different studies have each approached the repair machinery from slightly different perspectives, while at the same time they have cumulatively built a more comprehensive understanding of how repair work is accomplished in classroom interaction. In the following, I will selectively introduce these studies from the point of view of variation and congruence in their findings instead of summarizing them one by one. I will begin with the differences and then move on to similarities. The repair mechanisms, i.e. how repair has been shown to be initiated or performed in classroom interaction, are briefly brought up in connection with the analysis in chapter 6.

The differences in the studies concern the number of repair trajectories identified for classroom discourse, the identification of the diverging classroom contexts and how they are characterized, and the types of repairables that are repaired. The number of repair trajectories, i.e. by whom repair is initiated and completed, found in each study varies from four (Jung 1999) to six (or eight) (van Lier 1994) and to eight (Kasper 1986) in L2 classrooms. For CLIL classroom interaction, Dalton-Puffer (2007) has identified ten repair trajectories (of which eight are the same as van Lier's), but she also includes non-repair instances and meta-talk about errors in her analysis. The difference in the number of trajectories can be explained, first of all, by the analytic focus of the different studies, i.e. whether or not student- or learner-initiated turns have been examined in addition to teacher utterances. Secondly, the differences are due to the number of the lessons examined. Kasper's (1986) eight repair trajectories are

the result of learner-initiated repair utterances being included in the analysis, whereas Jung's (1999) four trajectories are most likely due to the fact that she has analysed only one lesson.

On a higher level of interaction, the categorization of different activities or discourse contexts in the studies differs. While Jung (1999) has examined learner role-playing activities and teacher-fronted activities, Kasper (1986) has looked at language-centred and content-centred phases of L2 classroom interaction. Van Lier (1994) has used yet another categorization in which the purpose of the repair, whether it is medium-oriented (i.e. language), message-oriented (i.e. content) or activity-oriented (i.e. organization), plays a determining role. The three categories can overlap such that medium-oriented repairs occur in message- and activity-oriented contexts (van Lier 1994: 188). Seedhouse (2004) has similarly distinguished three contexts: form-and-accuracy, meaning-and-fluency and task-oriented contexts. Fundamentally, it can be said that van Lier's and Seedhouse's categorizations are the same, although the labels with which they refer to the contexts are different. In fact, Walsh (2006: 60) draws attention to the metalanguage in which the micro-contexts have been labelled in various L2 studies and points out that a "lack of an agreed metalanguage makes the processes of comparison and generalization practically impossible, as the constructs used have different meanings." Notwithstanding this criticism, Walsh (2006: 62–82), himself, identifies four classroom modes in three of which (i.e. classroom context mode, skills and systems mode and materials mode) the focus of repair is dissimilar. He thus introduces yet another way of labelling the possible micro-contexts that can occur in L2 classrooms.

Across the studies, there is also variation in terms of the types of repairables which have been addressed in repair work. For L2 classroom interaction, three main types of trouble sources have been identified: language, factual and reasoning (van Lier 1994: 183; to some extent also Kasper 1986). Repairables related to language issues can further be divided into phonological, lexical and syntactic errors (van Lier 1994: 183). Other repairables, particularly for CLIL classroom interaction, have been identified by Dalton-Puffer (2007: 220), who has categorized eight different types: grammar, vocabulary, pronunciation, discourse, factual, channel and processing. The difference between the number of repairables is most likely related to the difference in the nature and role of the medium of instruction in the two settings. However, the findings of the studies suggest that different types of repairables are repaired through distinct repair trajectories (e.g. Kasper 1986; van Lier 1994; Dalton-Puffer 2007). For instance, Dalton-Puffer (2007) states that factual and lexical errors are often repaired by way of other-initiated self-repair, while grammar errors are repaired through other-correction, i.e. by the teacher. This indicates that in CLIL classroom interaction linguistic problems are primarily repaired by the teacher, whereas the students are given an opportunity to self-repair factual problems, thus affording them opportunities to process content information and to take part in the co-construction of content knowledge.

For the purposes of the present study, the similarities in the classroom repair studies and their findings are crucial inasmuch as they offer a particular lens through which to examine the organization of classroom interaction in the two settings under analysis – EFL and CLIL lessons. The most significant observation that has been made in the previous studies is the role of repair trajectories in different activity types or interactional contexts, where the participation frameworks are also differing (Seedhouse 2004; Jung 1999; van Lier 1994; Kasper 1986; Dalton-Puffer 2007; also Walsh 2006). Each study has shown how teachers and learners are afforded different types of participation opportunities and constraints in conducting repair in interactional contexts that are not organized in a similar manner and that have different pedagogical goals.

For instance, Jung (1999) has observed that in teacher-fronted activities other-initiated other-completed repair is utilized more than in learner role-playing activities, while it is nevertheless used in both contexts. Other-initiated other-completed repair in learner role-playing activities is characterised by the teacher initiating the repair through a repetition of the trouble source. The repetition is performed with a rising intonation. Such repair sequences are always continued by a third party and completed by the teacher, who evaluates the performance. Jung (1999: 160–162) points out that the use of a rising intonation contour in this kind of repair sequences functions as the marker of trouble and invites correction; an interactional feature learners recognise and orient to (see also Hellermann 2003).

Kasper (1986) has similarly noted that different repair trajectories are used differently in the language-centred and content-centred phases of the lesson. A frequent repair trajectory in the language-centred context is teacher-initiated self-completed repair by the learners, after which a teacher confirmation follows (Kasper 1986: 28). The most frequent trajectory is teacher-initiated other-completed repair, in which the other-completion is carried out by a third party, another learner (Kasper 1986: 30). This type of 'delegated repair' (Rehbein 1984 as quoted by Kasper 1986: 30) seems to be a pedagogically useful way of securing (other) learners' participation during the instruction. Markee (2000: 112) has pointed out that such a repair trajectory is a particular "organizational resource of pedagogical talk". In the content-centred phase Kasper found that self-initiated self-completed repairs by the teacher are frequent (Kasper 1986: 33). These are pedagogically important for the learning process as they guide learners to find the right answers to the teacher's questions or help learners to understand the content of what the teacher is saying (Kasper 1986: 30–35). In general, Kasper suggests that in the language-centred phase, which is constructed as a more asymmetrical and linguistically focused discourse, repair work is done through the use of the pedagogical exchange, and thus the repair constitutes a representation of pedagogical repair.

In addition to Jung and Kasper, van Lier (1994) has noted the differences between discourse contexts and has pointed out that not all the repair trajectories occur in the same frequency in all classroom contexts. For instance, the amount of same-turn self-repairs by both teachers and learners varies from one type of activity to another (van Lier 1994: 194). Dalton-Puffer (2007) has also

pointed out that the kinds of activities CLIL lessons are constructed from influence the amount of repair done in the lessons. Similarly Seedhouse's (2004, 1999, 1996) study shows the variation between classroom contexts and repair trajectories. He refers to the contextual variation as being a matter of preference organization (Seedhouse 2004). A more detailed description of his study will be provided shortly.

The clear consistency in observing repair practices from the contextual perspective of interaction in prior studies has provided a strong foundation for the present study as the analysis of teacher repair practices is carefully carried out by paying close attention to various classroom activities and their sequential organization as well as to their pedagogical orientation and the participation frameworks established within each ongoing activity. More importantly, the analytical focus in the present study is on how the actions of teacher and students are influenced by the different mediating artefacts of the setting. Consequently, the teacher repair practices in focus here are those that are performed in activities mediated by various artefacts. This line of inquiry will enable a deeper insight into how teachers and students go about constructing their turns-of-action and how they pay attention to the local exigencies of individual activities and their overall contextual configuration.

Another feature common to the prior classroom studies is that they have each examined the role of repair in teacher-led, IRE-based instructional activities, in addition to having examined repair in other interactional contexts. Within the IRE sequence, the teacher-performed other-correction or repair initiation has characteristically been produced at the third turn of the tripartite sequence, the evaluative turn, in both form-focused and content-focused contexts (Kasper 1986; van Lier 1994; Jung 1999; Seedhouse 2004). The present study is no exception with respect to how the repair machinery in and through the tripartite instructional sequence is examined. In fact, the primary focus is on teacher-initiated repairs on a variety of repairables that are repaired either by self, other (peer) or the teacher in and through the third turn. However, the role of the IRE sequence in the present study is taken as the starting point from which teacher repair practices are not only described but also expanded on to portray a multifaceted and multilayered picture of what repair work involves in classroom interaction.

3.2.3 Different preferential organizations of repair in distinct classroom contexts

On the basis of the prior L2 classroom repair studies (e.g. van Lier 1994; Jung 1999; Kasper 1986), Seedhouse (2004; also 1996) has introduced an alternative framework through which L2 classroom repair could be described and observed (introduced in section 1.2.4). It derives from the idea that there is a reflexive relationship between pedagogy and interaction insofar as "each L2 classroom context has its own peculiar organization of repair and this is reflexively related to the pedagogical focus of the context" (Seedhouse 2004: 142). In other words, for each L2 classroom context, a pedagogical focus can be

identified, which is at the same time its goal. Repair and its actualization on the turn-by-turn level in different activity contexts are inherently intertwined with the pedagogical goal. The relevant factors that play a role in the repair organization relate to the participants involved in the repair, the repair trajectories, the repair mechanisms as well as the repairable itself – i.e. what is being repaired (ibid.).

Seedhouse (2004, 1999) has described the repair organization of L2 classrooms through three of the four L2 contexts: form-and-accuracy, meaning-and-fluency and task-oriented contexts.[18] In the form-and-accuracy context, the pedagogical goal is related to linguistic phenomena: the students are to supply correct linguistic forms to teacher-issued questions, and when their responses do not match the target response, the teacher initiates repair (Seedhouse 2004: 143–149). The repair can be initiated even where the responses at first seem to be correct, but nevertheless contain features that were not sought by the teacher. The repairable can thus be anything that does not equal the linguistic form the teacher is looking for (cf. the definition of repairables by Schegloff et al. 1977). The student responses are therefore tightly connected to the task at hand, and there is little negotiation of meaning involved in these contexts. Additionally, the turn-taking organization is strictly controlled by the teacher. As such, the prevalent repair trajectory in this context is other-initiated self-repair, in which the repair is always initiated by the teacher. Also other-initiated other-completed repairs occur, where the other-repair can be performed by either the teacher or a student peer.

In meaning-and-fluency contexts, the students have more interactional space since the pedagogical focus is on negotiation of meaning (Seedhouse 2004: 149–153). Linguistic accuracy is not the primary goal in these sequences; rather the participants strive to establish mutual understanding despite linguistic errors. These are only brought to the fore if the establishment of intersubjectivity is at stake; that is, if communication is not progressing because of linguistic troubles. The repair organization resembles that of ordinary conversation, and different repair trajectories occur in this context. More importantly, most teacher repair initiators seek to clarify the students' utterance meanings, not to correct the way things have been said. However, in another study that examines the possibility and usefulness of observing L2 classroom interaction by combining CA and sociocultural theories, Seedhouse (2007a) has considered other teacher repair techniques that focus on linguistic items and their correctness in the meaning-and-fluency context. The analysis reveals that the teachers' both embedded and direct repairs, when constructed in particular sequential places, enhance the students' uptake of the corrected items, while at the same time do not interfere with the emerging interaction (Seedhouse 2007a).

The last of the L2 contexts Seedhouse (2004: 153–158) discusses is the task-oriented context, where the pedagogical focus is on accomplishing the given

[18] In his PhD thesis (1996), Seedhouse introduced six different L2 contexts, but since then he has modified the framework, and focuses in the 2004 paper on three L2 contexts that appear to be more clearly defined.

tasks to good effect. Consequently, the repair work in this context is related to trouble sources which hinder the students' task accomplishment. The teacher's role is particular in that students primarily solve the task-related problems by themselves, and only occasionally call for the teacher's assistance. Therefore, the repair trajectories are different in this context than in the other two: there are both student-initiated and teacher-initiated repairs, but mostly teachers perform the repair when students have initiated it. The repairables, on the other hand, deal with both linguistic and procedural aspects as well as cognitive processing troubles.

Repair techniques vary across L2 contexts, and Seedhouse (2004: 159–162) proposes that different repair devices are more suitable or more functional in some L2 contexts than in others. The most unexpected finding vis-à-vis the repair structure he describes is that teachers tend not to employ overtly negative corrections; rather they construct their repairs through other means. This is the result of teachers following pedagogical recommendations that instruct them not to evaluate student responses negatively as this would risk threatening or offending students' feelings or emotions (Seedhouse 2004: 172). What he argues, however, is that the pedagogical recommendations and the interactional practices carried out by teachers, in fact, highlight a dispreference for negative evaluations, displaying in the process that it is face-threatening to make mistakes (Seedhouse 2004: 175–176). There is thus a paradox between the pedagogical recommendations and the actual teacher practices and their underlying principles.

All in all, Seedhouse (2004: 159–162, also 2007a) advocates a context-based approach to repair in L2 classrooms and points out that it is necessary if we are to discover the different repair techniques teachers employ and to what ends. A context-based perspective is also imperative if we want to gain further understanding of the phenomena that are addressed in classroom interaction as repairable and the way the trouble sources are oriented to and dealt with by the participants themselves. Seedhouse's (2004) findings reveal that the inherent orientation of both participants – teachers and students alike – towards each L2 classroom context is constructed through a particular type of interactional organization in which all parties have certain constraints and opportunities with respect to participation and influencing the emerging interaction. For each classroom context, there is thus a preference organization of repair that manifests the reflexive relationship between pedagogy and interaction: participants structure their goal-oriented interaction by paying close attention to what each context is set to accomplish and how on the level of turn-organizational participation.

Above it was mentioned that the three phenomena the different classroom repair studies have addressed (i.e. the relationship between repair and correction, the varying repair trajectories and the preferential organization of repair) are intertwined and cannot be examined in isolation from one another. Seedhouse's (2004) description of the preference organization of L2 classroom repair explicates this particularly well. He has been able to show the interrelatedness of each phenomenon and how they are woven into teachers'

and students' actions in complex and contextually sensitive ways. The present study adopts the same kind of context-based, and essentially activity-related, approach to describing teacher repair practices in the EFL and CLIL classrooms. It contributes to the prior research by providing insights into how the role of different mediating artefacts, such as books, transparencies and the blackboard, influences the design, the sequential organization and the accomplishment of classroom repair.

3.3 Third turn repair practices in instructional interaction

It was noted earlier that the interactional site of third turns in any action sequence is the place for interactants to display their shared understanding of what is taking place in the ongoing interaction, and thereby to initiate repair if need be (Heritage 1984). In particular, in different instructional interactions with specific participation configurations (i.e. parent-child) or in institutional settings (e.g. speech therapy and classroom interaction), the third turn of a three-part activity sequence is a characteristic sequential position used specifically to initiate or perform repair. Studies on both parent-child interactions (Drew 1981; Tarplee 1996) and speech therapy sessions (Tykkyläinen 2005) have revealed the flexibility of the third turn in repair actions as it is dynamically constructed and adjusted to the emergent interactional needs of the participants.

In classroom interaction, the third turn of the IRE sequence is employed to perform a variety of interactional and pedagogical functions in different classroom settings, including repair (e.g. Sinclair & Coulthard 1992; van Lier 1994; Leiwo et al. 1981; Leiwo et al. 1987a, b; Nassaji & Wells 2000; Hall & Walsh 2002; Hellermann 2003; Seedhouse 2004; Margutti 2004; Lee 2007). The following presents a selective review of classroom research that has addressed both implicitly and explicitly the relationship between third turns and the role of repair in and through the turn.[19] In general, it can be said that the third turn and its role and functions in classroom interaction have greatly been debated and examined in two divergent approaches to the study of discourse: discourse analysis (DA) and CA. I will begin the review with two discourse analytic studies of classroom interaction, and then move on to CA studies. A brief look at CLIL education studies and their findings from a CA perspective is also provided at the end of the section.

In general, discourse analytic studies have categorized and identified the third move of the three-part teaching exchange through relating the linguistic form of the move to the social action it accomplishes in a rather formalized

[19] As Lee (2007: 1204–1208) and Seedhouse (2004) rather extensively summarize the prior work on teacher evaluative turns as well as provide long lists of references to relevant studies, I will not report all the studies here. Instead I will concentrate on summarizing those studies that are relevant for the purposes of this study.

manner (e.g. Sinclair & Coulthard 1992; Nassaji & Wells 2000). For instance, Sinclair & Coulthard (1992) have identified the teaching exchange as consisting of three moves, which are further classified into acts according to the kinds of discourse functions they display. Each act in the IRF cycle is therefore seen to present a single, fixed function on the basis of the speech act it embodies. With regards to feedback as a move through which repair can be conducted, Sinclair and Coulthard (1992: 29) categorize it as part of a bound exchange, which is initiated in the feedback move either in the form of a re-initiation or without one. They do not refer to it as repair, but it is the phenomenon of repair that can be seen operating in the bound exchange. The kind of straightforward categorization of the acts and moves that Sinclair and Coulthard present is highly abstract and static. In a similar manner, Nassaji and Wells (2000) have provided a description of the follow-up move in terms of its varied functions, in particular, the kinds of student participation opportunities it affords. They have shown how the teacher's choice of the nature of the follow-up move affects the type and quality of student participation, thus influencing the level of dialogue in the interaction. In terms of repair practices, Nassaji and Wells' (2000) categorization of the IRF sequence into nuclear and bound exchanges, with bound exchanges being further divided into embedded or dependent exchanges, resembles that of Sinclair and Coulthard (1992).

Acontextualized and formalized categorizations such as those of Sinclair and Coulthard and Nassaji and Wells enable a systematic and quantifiable analysis of the moves inasmuch as they are generalizable and transferrable to other materials and data, but they do not detail the contingency of the moves on the sequential or contextual level of interactional organization. In other words, the kind of functional, quantifiable approach promoted in these studies does not take into consideration the micro-contextual aspects of the interaction or the interrelatedness of individual moves within the larger IRE sequence. Neither does it pay attention to the overall activity context nor to the interactional and pedagogical features manifested in and through the interaction (e.g. Lee 2007; Drew & Heritage 1992: 13–16).[20]

From a CA perspective, a change in the way the IRE sequence and its relationship to repair is considered can be traced to the work of van Lier (1994). He has described the functions of the different parts of the IRE sequence from the bottom-up observing how teachers and students carry out repair. He has identified several sequential places where repair can be initiated or performed in instructional activities. One repair type that is primarily missing from ordinary talk that he has found in classroom interaction is teacher-performed other-repair in the third turn of the IRE sequence (van Lier 1994: 199–201; see also Dalton-Puffer 2007: 215). Teacher-issued repair initiations also occur in the evaluation slot. Van Lier (1994: 200) points out that when the repair work is established in the evaluative turn, the "[r]epairing is thus woven into the texture of exchange structuring, both as parts of moves, and as full moves."

[20] See also Margutti (2004: 55–59, 375–377) for a more detailed description and commentary on the nature and content of the Sinclair and Coulthard (1975) study.

By and large, various studies focusing on talk-in-interaction from a sequential and contextual perspective have promoted careful observation of how the third turn is constructed and performed as an interactional action within a sequence of other actions, how it is shaped by the preceding interaction, and how it shapes the unfolding interaction (Lee 2007; Margutti 2004; Hellermann 2003; 2004; Pehkonen 2008; see also Tykkyläinen 2005). Microanalytic approach to examining the third turn provides insight into its more context-sensitive construction. That is, the third turn is not only used to treat students' answers, but to convey the teacher's interpretation of the student's answer in relation to the first turn initiated by the teacher (Lee 2007; Routarinne 2008). The practices that have been examined include among others, prosodic patterns (Hellermann 2003; Margutti 2004), the types of repairs conducted (Margutti 2004; Pehkonen 2008), and the contingent and interpretive work teachers carry out through the third turn (Seedhouse 2004; Lee 2007).

In terms of the prosodic packaging of teacher third turns, Margutti (2004: 375–441), for instance, has shown for Italian L1 primary school classrooms that there is a different prosodic packaging for repetitions that display positive appreciation of individual student responses and of repetitions of unison responses (also Hellermann 2003). One of the reasons for this is that an emphasized prosodic realization of the repetition of individual answers is to make sure that the answer is clear to all the students (Margutti 2004: 400–401, 440). The positively praising repetition is generally produced in slight overlap with the student answer, which further manifests its positive assessment, and also in my opinion, the preferred character of the turn. Repetitions that are accompanied by different types of TCUs, on the other hand, are used by teachers to indicate that student responses are inappropriate or problematic in relation to the question asked. In addition, there are other devices teachers employ in the third turn to indicate that the student answer is not what is sought, for example temporal delay in beginning the third turn and various verbal formulations (Margutti 2004; also Hellermann 2003). Some of these findings will be further raised and discussed in the analysis.

On the whole, Margutti's (2004) analysis reveals the contingency of the third turn receipt and its design on students' second turn answers. More importantly, it demonstrates how the IRE sequence is co-constructed through the participants' mutually constituted orientation to what is embodied in particular sequences of questions and answers. That is to say, both teacher and students orient to and interpret the verbal, prosodic and temporal design of teacher third turn utterances as accomplishing different types of repair work in diverse contexts in order to attain particular pedagogical goals (also Seedhouse 2004). More importantly, all the studies mentioned above show that a differently designed third turn that is used to realize a positive assessment is a device to close the instructional sequence before a new one is launched, while repair initiators and other-corrections expand the instructional sequence until potential problems are resolved, after which the activity segment is closed (see section 2.1.2). The studies also illuminate the multilayered role of the third turn

and what it accomplishes with regards to creating co-constructed knowledge and learning opportunities for students.

Both Seedhouse (2004) and Lee (2007) underline the complex and reflexive interactional work teachers perform in and through the third turn. According to Seedhouse (2004: 164), the instructional sequence of IRE is too simplistic an identification when teacher repair practices are concerned, as teachers do not evaluate students' responses solely as positive or negative (see also Walsh 2006). Lee (2007) has also criticized earlier research on teacher third turns for neglecting to take into consideration the embeddedness and contingency of such evaluations on prior interaction. Both researchers illustrate how teachers enact the third turn in response to the students' second position answers: the nature and the design of the response turn directly influence teachers' actions in terms of the design and the accomplishment of their evaluations (Seedhouse 2004; Lee 2007). In addition, Lee draws close attention to the way in which the third turn "opens up an analytic possibility for describing the communicative acts that teachers display" (Lee 2007: 1226). Lee (2007, 2008) also points out that teacher third turns, while immediately contingent on student second turns, are also contingent on the prior interaction, including the teacher's first turn: what was originally sought in the first turn (also Routarinne 2008). In this respect, Lee's (2007) study on L2 classroom interaction demonstrates the interpretative and contingent work teachers perform when they evaluate students' answers, while concurrently moving the interaction forward. For this reason, it is important to describe the interpretative work teachers perform in the third turn as the realization of third turns exhibits teachers' interpretation of how students have understood teacher initiations and what students manifest they know via their second turn responses. Lee's analysis similarly reveals the reflexive nature of L2 interaction and pedagogy as it portrays how teachers through the sequential organization of interaction topicalize the teaching of content and language turn-by-turn or in mid-turn (see also Pekarek Doehler & Ziegler 2007). The interactional organization of question-answer sequences becomes a pedagogical tool in itself to steer students towards finding correct answers (also Margutti 2004, 2006). The findings of Lee (2007) and Seedhouse (2004) thus illustrate the multilayered meanings teacher evaluations accomplish, and how their functions are built on the students' second turns, either to accept them or to initiate different types of repair or other interactional sequences.

In the CLIL setting, Dalton-Puffer has not only looked at teacher repair practices in and through the third turn, but she has also argued that third turns, or feedback moves, as "the carrier[s] of 'repair'" are "central to maintaining intersubjectivity in classroom interaction" from an ideational viewpoint (Dalton Puffer 2007: 79). In this, as I see it, she takes a similar stand towards the contingency and local embeddedness of the feedback move on the initiation and response turns and their sequential implicativeness as Lee (2007, 2008). Furthermore, Dalton-Puffer (2007: 90–91) points out that it is through feedback moves that teachers renegotiate a shared understanding of the topic at hand and its content-relevant semantic relations. Not only is content-appropriate knowledge shaped through the feedback move, but also the content-specific

discourse in which it is presented is brought forward and identified (Dalton-Puffer 2007: 81–92). This resembles Pekarek Doehler and Ziegler's (2007) view of how content and language are interlinked in instructional interaction, although Dalton-Puffer's analysis reveals that at times the two are dealt with separately as interaction unfolds. Dalton-Puffer says, further, that the role of the feedback move and the repair that takes place through it are "providers of alignment between the discourses of the participants in the classroom and it is the teacher's role to secure this alignment in the interest of intersubjectivity and the creation of *common knowledge*" (Dalton-Puffer 2007: 85, italics in the original). A shared understanding of the appropriate semantic and content knowledge is then, for her, a prerequisite for any learning to take place.

With respect to the relationship between third turns and repair practices in the present study, third turns, the evaluation slot of the traditional IRE sequence, is considered as the interactional action space in which teachers portray their understanding and treatment of student answers, thus evaluating them positively and accepting them, or initiating or performing different types of repair actions in and through them. While the tripartite instructional sequence is taken as the starting point for the analysis, the analysis will generate a multisemiotically dynamic and context-sensitive construction of teacher repair practices such as has been called for (Seedhouse 2007b) and that has not been described before.

3.4 Repair and the role of embodiment

In what could be called the first generation of repair studies, the role of nonverbal behaviours in the organization of repair has not been discussed. In some of the studies embodied actions as potential targets of repair have been mentioned in passing (e.g. Jefferson 1987) and in other studies the role of gestures and gaze direction in repair work has been touched upon (Goodwin 1981; Schegloff 1984), but no systematic examination has been conducted of how physical actions are repaired and what is addressed through such repairs. Neither has there been any systematic examination of how interactants construct their repair actions through embodied or other semiotic means. But as the examination of repair has gradually spread from ordinary conversations to cover a wide range of everyday and institutional settings and their social practices, the understanding of the organization of repair has also seen an expansion in what is considered as repair. Repair is no longer only considered in relation to problems of understanding, speaking and hearing in talk-in-interaction: it is also seen to pertain to the broader situated and cultural practices speakers perform and construct in and through their interaction in order to achieve shared understanding of the events taking place (see e.g. Jordan & Henderson 1995). Thus, the expansion has brought with it an interest

towards and a realization of the importance of the multisemiotic resources drawn on in people's social practices at large, and in particular, in repair.

How repair work is structured and accomplished as a multisemiotic phenomenon is the focus in the present section. In general, it can be summarized that the prior research on the multisemiotic nature of repair work has described the role of different embodied actions as intertwined with the repair mechanisms accomplished through verbal means or as interactional actions on their own deployed in either initiating or completing repair. In the following, I will try to chart the prior research on the multisemiotic nature of the organization of repair.[21] I will begin with same-turn self-repair practices, i.e. word searches, in everyday conversations proceeding slowly towards other forms of repair in both everyday and institutional settings. The review is based on CA work; other theoretical and methodological approaches to nonverbal research have been excluded.

3.4.1 The role of gaze and gestures in projecting word searches

Interactants' embodied actions in word searches, where the speaker has trouble in finding a particular word, and therefore initiates repair, have been studied in everyday interactions (Goodwin 1981; Schegloff 1984; Goodwin & Goodwin 1986; Streeck 1993, 1994, 1995), in conversations with and among aphasics (Klippi 2006), and in L2 novice speaker conversations (Carroll 2006), among others. These studies reveal that word searches as a repair phenomenon are a co-constructed, mutually oriented to interactive accomplishment, in which together the participants negotiate the nature of the word search: whether it is carried out by the speaker alone or whether it is to be accomplished jointly. In the latter case, the recipient becomes a co-participant in the search and its resolution. More importantly, word searches and their co-constructed nature have been shown to be an intercultural and intergroup phenomenon employing the same kinds of interactional practices but in divergent participation configurations. In other words, similar word search practices are not only operative within L1 talk, but in other types of talk as well. In this section, I will focus on one characteristic shared by these practices: how impending word searches are projected through embodied actions.

In general, the embodied resources examined in word searches include the participants' gaze trajectories as well as the different gestures performed before and during the repair. It has been shown that speakers can mark an emerging word search in addition to various verbal and non-verbal means (e.g. cut-offs, sound stretches, and *uh* or *uhm* particles together with pauses[22]) by averting

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[21] Prosody and its role in repair are, however, excluded from the present section as it has been reported for classroom interaction in sections 3.3.1 & 3.3.2 above.

[22] These repair initiating devices (Schegloff et al. 1977: 367; Schegloff 1979) are descriptive of L1 talk. For L2 conversations, Carroll (2006: 241–291) has shown additional devices to be at play when word searches are initiated by speakers. The other devices include, among others, vowel-markings, sound stretches, cut-offs and various embodied displays.

their gaze from the recipients (e.g. Goodwin & Goodwin 1986; Carroll 2006). The speaker's disengagement from the participation framework via gaze shift has been shown to take place before any verbal signs of repair initiation are produced, thus projecting the initiation of repair (Carroll 2006: 262–270). As speakers launch themselves into the word search, recipients shift their gaze towards the speakers, thus displaying, on their part, their continued attentiveness as hearers and co-participants in the activity (Goodwin & Goodwin 1986).

Goodwin and Goodwin (1986) have suggested that there are different stages in both the speaker's gaze trajectory and gestural production that disclose the level of successfulness of the search for the co-participants. Generally when the search is successfully completed, speakers return their gaze towards the recipients and complete the repair by uttering the target word. The return of the speaker's gaze displays to the recipients that the word search is about to come to completion, thus projecting its resolution. What is interactionally relevant in the speaker's gaze trajectory for the recipients is that the different stages of the search manifest possible interactional points within the current turn where recipients can produce candidate understandings, thus becoming actively involved in the repair work. For instance, when speakers either keep their gaze directed at or shift their gaze towards recipients in the midst of the search, the gaze serves to invite the recipients' involvement so that they can offer possible candidate solutions (e.g. Carroll 2006; Klippi 2006).

Speaker's gestures in word searches have also been shown to project the emerging repair and its initiation. For instance, Schegloff (1984) has observed how speakers produce through gestures the contents of their lexical affiliates before these are uttered. These gestures can coincide with the vocal indications of an impending repair, such as sound stretches, and thus serve to indicate the forthcoming repair (Schegloff 1984). Carroll (2006), on the other hand, has shed light on the role of embodied actions in constructing backward-oriented and forward-oriented repair in word searches in L2 conversations. His findings reveal that L2 speakers employ mere gestures in initiating backward-oriented repair: no verbal means or other voiced formulae are used to indicate that repair is pending (Carroll 2006: 228–231). More importantly, in forward-oriented repair the speakers' embodied displays in co-occurrence with or prefacing audible repair initiators (i.e. different types of sound stretches) project the forthcoming repair work (Carroll 2006: 244–247). Carroll (2006) has thus illuminated how interactants signal emergent repair work through embodied means in pre-turn position before actual TCUs are produced (Carroll 2006: 244–270; cf. embodied actions as projective devices in constructing dispreferred turns discussed in section 2.3.2).

The examination of the use of gaze and gestures in word searches has revealed that they can be employed by speakers as projective devices indicating forthcoming word searches that can be brought to completion either by the speaker or the recipients. Moreover, co-participants are shown to orient to these embodied actions as interactionally meaningful and sequentially implicative for their actions. Such insights into how embodied actions are drawn on in repair

work underline the importance of holistically examining the interactants' social practices and how they achieve and construct their turns-of-action. These findings have relevance for how classroom interaction is organized and provide tools for describing the ways in which teachers project different types of forthcoming next actions, including dispreferred third turn repair actions, through embodied and material means. The findings also provide important insights with respect to how recipients interpret and act upon the speaker's emerging actions as these are parsed online by the recipients.

3.4.2 Different orders of embodiment in repair trajectories

In recent studies the embodied resources used for repair work have been shown to be interactional actions in their own right rather than merely parts of overall verbal turn-constructional units. In different situations ranging from adult-child interactions to pedagogically oriented settings, from technologically mediated settings to workplace environments, participants treat and interpret divergent embodied displays as meaningful events and sequentially relevant actions that assist in accomplishing whatever social action is taking place. Some of these interactional functions embodied resources have been observed to play in repair work, whether as individual actions on their own or as parts of verbal TCUs are depicted here. Studies that have addressed embodied displays as plausible trouble sources are introduced first, after which the work on embodied actions as repair initiators is reviewed. I will end the section with studies of embodied resources as repair completion devices.

In speech therapy sessions (Tykkyläinen 2005) and driving vehicles (Haddington & Keisanen 2009; Haddington forthcoming), participants' embodied actions have been shown to be constructed as possible trouble sources in need of repair. Both of these situations are social, interactional situations where the interactants' actions in relation to the goals of the ongoing activity and their accomplishment are essential. Repair practices in such contexts are therefore delicately timed and sensitively structured in and through the sequential organization of the interaction. In children's speech therapy sessions, Tykkyläinen (2005: 120–129) has observed the careful timing of the therapist's verbal repair initiators (i.e. explicit rejections followed by further instructions or implicit supplementary instructions) which address children's problematic or erroneous embodied responses, i.e. second position turns in the IRE sequence. The children's embodied response beginnings are thus made the loci of corrective practices already before the children are able to bring them to completion.[23] The more problematic the child's response is the more interactional resources the therapist uses as the repair sequence unfolds for guiding the child to find the proper response (Tykkyläinen 2005: 146). The resources used by the therapist in guiding the child's responses towards successful achievement consist of pointing gestures together with verbal

[23] The therapist is also shown to initiate repair after child's completion of an erroneous response. In such cases, the repair is explicit. (Tykkyläinen 2005.)

instructions and gaze directed towards the materials used. In such repair sequences, the participants' actions in terms of the repair sequence are shown to be partly simultaneous and overlapping and partly intertwined.

In the domain of negotiating routes in a moving vehicle, repair practices are also finely and skilfully timed with the participants' unfolding interaction in the multilayered and constantly changing mobile environment (that being in a moving car represents). Haddington and Keisanen (2009) and Haddington (forthcoming) have examined how negotiating routes, and particularly next junctions, is a collaborative endeavour. The studies reveal the constant interpretations the participants perform not only of each other's multisemiotic actions in the car, but also of the changing scenery and the surrounding traffic and their influence on the interaction and decisions taking place inside the car. Special attention in these studies is paid to moments when the participants approach different junctions, at which point they negotiate whether to turn or not, and in what direction to turn, if turning is required. The trouble sources at such interactional sites are shown to be embodied, situated actions relevant to the ongoing task: taking a turn and signalling its occurrence by turning on the indicator. Such embodied repairables were found to be followed by an immediate other-initiated verbal repair by the passenger. The timing of the repair initiator is crucial in that the driver has time to turn off the signal before they arrive at the junction in order not to convey to other vehicles inaccurate information about their intended movements in the traffic. This observation has revealed an important difference between static interactions and their preference organization and a moving environment and its preference organization in terms of the sequential production of other-initiated repair (Haddington forthcoming). The repair initiator and the following embodied repair, i.e. turning off the indicator, are at that moment, at that location, a sensitive interactional task that is contingent not only on the participants' actions in the car, but on the whole situational context of the environment in relation to the destination and the route selected. Therefore the other-repair cannot be produced with delay as it would be done in immobile interactions. In different in-vehicle negotiation sequences, the repair devices, as well as the trouble sources, can be more varied and complex consisting of talk and embodiment. (Haddington & Keisanen 2009; Haddington forthcoming.)

In the same way as trouble sources can consist solely of embodied actions, so too can repair initiators be performed using nonverbal means only. For different types of child-caretaker interactions, where children either request objects from adults (Wootton 1994) or show objects to adults (Kidwell and Zimmermann 2007), children's gesticulations and vocalizations in repair sequences have been shown to gradually become more sophisticated over time. Children develop interactional sensitiveness and growing understanding towards the ongoing situation, the caretaker's actions and their own actions vis-à-vis each other and how each influences the timing and the design of a child's repair initiators. Children have been shown to be flexible interactants who change or adjust their embodied behaviours when caretakers do not provide expected responses, for instance, do not take the object when it is given to them,

or do not show appreciation of an object, when it is requested (Kidwell and Zimmermann 2007). For example, in object-requesting sequences, the child initiates repair through a myriad of embodied resources such as turning the head away from an undesired object, taking the given object, but re-aligning towards another one through pointing or quickly reaching towards it while abandoning the given object, and head shakes (Wootton 1994). A number of vocalizations that, however, are not recognizable as words per se accompany these embodied displays. Different combinations of resources have been shown to be used at different ages and variation in frequency is also observed. Whatever the combination of resources the child uses, the caretaker interprets them as rejections and re-requests in the context of handing objects: the child's actions are designed to be intersubjective and interpreted by the parent as such. (Wootton 1994.)

In a completely different setting, a physiotherapeutic session, it has been shown that repair work is accomplished as a multimodal phenomenon in which the participants' actions, body movements and changing participant configurations are crucial in revealing the gradual success of the physiotherapy (Martin 2004). The repair practices examined include both verbal and embodied repair initiators as well as verbal and embodied completions of repair. For instance, within the activity of practising a basic posture, the therapist is seen to initiate repair by tapping on the patient's shoulder, after which the patient lowers it to the resting position. The repair sequence is primarily accomplished through embodied means, but verbal elements accompany the activity and the repair in a complex and sequentially sensitive manner. The organization of repair from other-initiated self-completed repair at the beginning of the therapy is gradually replaced by self-initiated self-completed repair of the shoulder position by the patient towards the end of the therapy. The participants' repair devices, while these are small micro-phenomena, are nevertheless essential in the situated practice of therapy sessions and the overall aim of the therapy. Although they are fleeting moments in the interaction, they are meaningful for the participants as shown by the fact that their culturally situated practices take on new forms: i.e. the patient takes more control of the body and its actions. (Martin 2004.)

All in all, the different studies have highlighted how interactants are sensitive to not only the immediate context of the sequential organization of their interaction in designing their repair actions, but also to the larger activity at hand and its situated goals, demands and constraints as well as to the broader cultural and situational context (i.e. the material and physical surrounding) and its effects on the timing of the initiation and completion of repair. Recipients therefore pay close attention to the current speaker's or actor's actions and the kinds of actions they foreshadow for their own impending turns-of-action, and perform repair in a sequentially implicative manner. Research has also highlighted how interactants both design and interpret embodied actions as intersubjective to the extent that some social actions are performed only through embodied means, either as first or second-pair parts. The present analysis will demonstrate how teachers pay close

attention to the students' responses and their progress and foreshadow their repair actions through a variety of multisemiotic means that are sensitive to the overall contextual configuration of each ongoing classroom activity. In addition, it will be shown that teachers and students alike interpret the teacher's sequentially implicative embodied actions as meaningful turn-allocation devices.

3.4.3 Embodied and material resources in classroom interaction repair

In classroom research, the multisemiotic nature of instructional discourse, and particularly of repair, has not yet been a very widely examined area. Of the studies referred to in section 3.2, those McHoul (1990), Margutti (2004), and Pehkonen (2008) include descriptions of embodied phenomena either as the trouble source or as part of the repair mechanism. In addition, there are a handful of other studies that have examined the role of embodied displays in whole class, group work and study counselling situations. Repair per se has not necessarily been their primary locus, but descriptions of repair phenomena have been included as well. As with other studies on embodiment and repair work, in classroom interaction repair can address different types of problems related not only to speaking, hearing and understanding, but to the practices and specific pedagogical and interactional tasks of the setting. Below, I will briefly introduce studies that have examined how teachers and students design their repair actions in instructional situations. The discussion in terms of whole class interaction will also include how the mediating role of different pedagogic artefacts influences the shape of the participants' repair actions. Both these aspects are crucial in understanding the present analysis and where it derives from. This brief introduction also sheds light on the import of the present study for the field of classroom embodiment research.

The ways in which teachers design their third turn repair initiators have been described by Margutti (2004) and Pehkonen (2008). For instance, Margutti (2004) has shown that the direction of the teacher's gaze and body serve as signs for the class that their participation is solicited in the completion of the repair. In such instances, the teacher calls for other students' suggestions to her initiation instead of requesting repair completion from the student who had originally been nominated as the respondent. Pehkonen (2008)[24], on the other hand, has observed that teachers employ a variety of semiotic resources to display their evaluation of student responses (e.g. head nods and shakes, gestures and writing on the blackboard). She has described how different types of teacher evaluations (i.e. acceptances, rejections and downgraded acceptances) are constructed in a number of combinations that include both verbal and nonverbal resources, mere linguistic elements or individual nonverbal behaviours. Her findings reveal how the teachers' embodied actions play a role

[24] Pehkonen's (2008) data partially overlaps with the data used in the present study. We have both analyzed the same biology CLIL lessons, and therefore our observations of the data are in some respects similar.

in the interpretation of the quality of student responses. For instance, the teachers in her data began to write the students' correct answers on a transparency or on the blackboard before they evaluated the responses positively. In this way, the teachers' embodied actions displayed the positive evaluation of the answer prior to its verbal assessment. In other words, the teacher not only projected the positive evaluation, but evaluated the response through the action of first writing the answer down (also Seedhouse 2004). Additionally, her analysis portrays the number of embodied devices teachers employ at the same time as when they positively evaluate student answers. Such devices are, for example, head nods and pointing gestures directed towards the respondents. With respects to negative evaluations, or repair sequences, Pehkonen (2008: 76–80) has noted that teachers did not use embodied devices alone (e.g. head shakes); instead they were always accompanied with speech. The embodied displays were also fewer in rejections than in positively assessing evaluations and they either supported or reinforced the verbal form of the negative evaluative turn (ibid.).

What Pehkonen's study (2008) has brought explicitly to light is the role that blackboards and other teaching materials play in the organization and construction of teacher repair practices. Her work highlights the importance of taking the whole interactional situation into consideration when describing repair in classroom interaction. The present study partly builds on her findings and elaborates them by identifying the sequentially and temporally sensitive multisemiotic resources through which teachers project impending repair work.

In the case of repair practices, Kääntä (2007) and Koshik (2002) have also alluded to the mediated nature of pedagogical interaction and how it influences the participants' repair actions and the sequential structure of interaction. Kääntä (2007), for instance, has briefly discussed an embodied repair practice in describing how teacher questions in IRE-based grammar-teaching activities are constructed to guide students in finding the responses sought. These instructional activities are mediated by transparencies on which teachers write example sentences that portray the grammatical aspect being taught (i.e. adjectives and their comparison). The teacher repair initiators are shown to be designed so that they draw the students' attention to the sentences written on the transparencies and their crucial elements in determining and deducting the correct response. Teachers do this, for example, by underlining the essential elements in the example sentences. Kääntä's (2007) analysis has therefore not only taken into consideration the verbal structure of the repair initiators, but also how they are designed to guide the students' knowledge construction through multisemiotic means, and to help them see and differentiate the grammar-related phenomena essential for the current topic (also Tykkyläinen 2005). The role of mediating artefacts in specific instructional activities is shown to be important as teachers draw on them in their meaning making practices (Kääntä 2007; see also Koshik 2002 for one-on-one tutoring in a writing conference).

In addition to whole class examination, research has focused on group work interaction in L2 classrooms and how it is organized in terms of embodied

displays, including repair (e.g. Mori 2005; Olsher 2005, 2008). Olsher, for instance, has examined an L2 group work activity in which the participants utilized embodied completions (2005) and gesturally-enhanced repeats (2008) to make sense of their prior talk that has engendered misunderstandings and to promote each others' understanding of what is taking place. The embodied completions, pantomime in this case, are employed by the speakers as they seem to offer more convenient and descriptive ways of differentiating between similar types of lexical expressions than mere verbal explanations. Thus, the use of an embodied action is shown to be a practical solution for speakers in seeking to convey a more profound meaning of a word that is troublesome to explain through the foreign language. (Olsher 2005.) The gesturally-enhanced repeats in other-initiated self-completed repair are either partial or complete verbal repeats of the trouble source and they are accompanied by gestures, body and gaze orientations (Olsher 2008). The multimodal type of repair turn addresses both the semantic content of the trouble turn, explaining its meaning further. In addition, it promotes the participants' understanding of the nature of the trouble source relative to the underlying action that was initiated in the trouble source turn. That is to say, the gesturally-enhanced repair manifests a more versatile interpretation of the trouble source than simply difficulty with a linguistic item: it also addresses potential hearing or understanding breakdowns and is engendered from already projected actions (also Olsher 2003). In terms of language acquisition, Olsher (2008) argues that such an examination, while not necessarily providing evidence of learning – or understanding of – the target linguistic items, reveals the participants' attentiveness to observing 'multimodal input' and their claimed understanding of the repair when they produce a sequentially relevant turn after the repair simultaneously showing that they accept the repair. (Olsher 2008.)

In general, it can be concluded that research on the organization of repair through different multisemiotic means is growing rapidly and already covers various interactional settings, as demonstrated by the literature review presented in section 3.4. All these repair-related studies have, first of all, deepened our understanding of the phenomenon of interactional repair. Secondly, they have shown how repair patterns have slightly different preference practices depending on the context of the interaction and how repair is used to address not only various types of problems of speaking, hearing and understanding but also the social and cultural practices of situated action. The present study adds to this line of research by further explicating the repair practices the participants in a particular institutional setting, the classroom, employ in specific activity contexts. It will, furthermore, reveal the multisemiotically minuscule practices the participants perform and draw on in their meaning-making, thus providing a more profound microanalytic description of situated, mediated interaction.

4 DATA AND ANALYTIC FRAMEWORK

The research methodology of the present study is contextualized in more detail in this chapter. It includes a description of the research questions, the data, the participants, the classroom settings, the transcription conventions, and the data collection. Additionally a brief discussion both on ethical issues and on the limitations of the methodological framework is provided.

4.1 Research questions

The primary focus in the study is to describe teachers' turn-allocation and repair practices in teacher-led activities that are primarily structured through the three-part IRE sequence. The two interactional practices are described in micro-detail and they manifest the variety of semiotic resources teachers draw on when constructing their turns-of-action. The empirical research questions are:

1) How do teachers construct their turn-allocations and repair actions and what kinds of communicative means do they employ in generating meanings in the EFL and CLIL classroom settings? Specifically,
   a. What linguistic and paralinguistic means are used?
   b. How are embodied actions (gestures, gaze, body posture and movement etc.), material resources and space utilized?
2) How are teachers' turn-allocations and repair actions fitted into each interactional context and to the emerging participation framework(s) and how are these shaped by teachers' actions?
3) What does the multisemiotic perspective into classroom interaction reveal about the sequential organization of instructional interaction?

These questions serve to explicate the design and interactional import of the two fundamental features of classroom interaction by which teachers accomplish their daily work. What is more, they portray the phenomenon

under study from different contextual levels of interaction. The first question is divided into two sub-questions that separately detail the verbal and nonverbal elements in the teacher turn-allocations and repair actions. The emphasis in the present study is in the participants' embodied conduct, although verbal and paralinguistic aspects are also discussed to an extent. When looking at these together, a picture of how teacher turn-allocations and repair actions are constructed in classroom interaction is gained. Therefore, the analytical findings with respect to question 1 reveal how individual actions of allocating turns to students or projecting the initiation or accomplishment of repair are constructed. Question 2 places these actions into the sequential contexts wherein they take place, and help contextualize how they are shaped by previous turns-of-action and how they further shape emerging turns-of-action. Together the findings of the first two questions shed light on the dynamic nature of the IRE sequence and how it is adapted to meet the participants' local, activity-related goals. Question 3 in turn is a methodological question that reveals how the use of different multisemiotic resources in teacher turn-allocation and repair practices can be viewed in terms of how they not only figure in but also reform the sequential organization of the IRE.

4.2 Research method

The empirical research method used in the present study is ethnomethodological conversation analysis as outlined in chapters 1, 2 and 3. The empirical tools and principles of CA are intertwined with a Goodwinian (2000a, 2003) view towards interaction as a dynamically developed, locally situated social action, which interactants build through a variety of semiotic resources, making them temporarily relevant for meaning-making at different points of interaction. The main reason for adopting such a combined methodological approach to the study of classroom interaction is that ethnomethodological CA enables the observation of interaction as it is experienced and understood by the participants (Heritage 1984; ten Have 1999; Seedhouse 2004). More importantly, the analysis of the interaction remains on the level of description, and therefore, no judgements are made about whether the actions the participants perform are pedagogically good or bad (e.g. Tainio 2007: 17). That CA research focuses on describing interaction is important in order to uncover the more general means and practices interactants employ in performing their social actions. By focusing on classroom interaction, the present study serves to depict those practices the participants employ in bringing the institutional context into being through not only their first language and second language, but also through the variety of semiotic resources available to them in the setting (cf. Gardner & Wagner 2005).

Through a specified focus on audio/video recorded naturally occurring interactions and their detailed transcription, CA provides analytical tools with

which the analyst is able to trace the interactants' own orientation to their interactional practices and to draw parallels between different types of situated actions within distinct types of classroom interactions. Seedhouse (1996: 345) points out that CA sufficiently distances the analyst with the help of the transcripts and the video recordings from the here-and-then pedagogical orientation of the classroom to the organization of interaction itself and how it is accomplished. It thus serves to identify retrospectively the relevant and meaningful features that participants orient to as they partake in the interaction and make it understandable to one another without having to observe this in the hectic pace of the actual interactional situation. The empirical tool for identifying the participants' understandings is what Hutchby and Wooffit (1998: 15; see also Sacks et al. 1974) call the 'next-turn proof procedure'. It refers to the reflexive way in which utterances, or turns-of-action, are combined to form sequences of actions, and how within these sequences a turn-of-action acquires its meaning on the way it is contingently built to respond to the previous turns and the way it makes conditionally relevant the production of a next action (see also Arminen 2005: 2–3).

More importantly, since CA does not consider the participants' roles, gender or identity as predetermined, it furnishes the analyst with empirical principles that enable perception of the manner in which participants negotiate and create, through the unfolding interaction, their participant roles (e.g. Heritage 1997; Tainio 2007). For institutional interaction this is especially relevant as the role of teachers and students is not taken for granted; instead the empirical investigation of the interactional data reveals how they construct their respective participant roles, and through this how they achieve the institutional task of the setting (Drew & Heritage 1992; Drew & Sorjonen 1997; Heritage 1997, 2005). For the present study, this is yet more important as one of the ways in which the participants build their participant roles concerns the different semiotic resources they draw on; for example how do students treat teachers' embodied actions? Are such actions sufficient to invoke sequentially relevant responses from students?

The Goodwinian framework of embodiment-in-interaction establishes a terminological and empirical basis for the systematic observation and description of the interactional practices that is, in my opinion, lacking in CA itself. It, therefore, provides a supportive framework through which to empirically identify and describe the embodied and other semiotic resources participants deploy in their meaning-making. Moreover, the fact that CA heavily grounds the analysis of interaction in recorded interactions and their description serves as an evidence of how the participants use such semiotic resources as gestures, body position, and pedagogical artefacts in actual interaction. The observation of these actions and their interactional import without the possibility of retrospective viewing, or possibly worse through the accounts or explanations of the participants themselves of how they employ such actions would not result in as detailed and profound understanding of the true colours of institutional praxis and its interactional organization (see e.g. Heritage 1984).

4.3 Description of data

4.3.1 Data recordings

The initial data for my dissertation comprise 24 video-recorded naturally occurring lessons. The lessons form part of a larger data corpus on classroom interaction collected in the Department of Languages, University of Jyväskylä over the past 15 years in connection with various research projects.[25] 12 of the lessons are English-as-foreign-language lessons (EFL) from upper secondary school and 12 are content-and-language-integrated-learning (CLIL) lessons from upper elementary school. The 12 CLIL lessons consist of 6 biology and 6 physics lessons. These subjects were chosen from the larger classroom corpus on the basis that their combined sum equals the amount of upper secondary-level EFL lessons, thereby providing almost comparable data in hours.[26] However, the final numbers of the turn-allocation and repair sequences examined here are not equal (the data collection and its content are explicated in section 4.6 below).

All the lessons of the present study were video recorded in 2003 in a school in central Finland. The EFL lessons were recorded at the beginning of the year, while the CLIL lessons were recorded towards the end of the year. The EFL and CLIL lessons were recorded at different times as they were collected for two different research projects that looked at classroom interaction. The EFL lessons were primarily recorded for a research project that aimed at looking at the participants' embodied actions in addition to the overall classroom interaction. The CLIL lessons were recorded for a research project in which the primary interest was in acquiring knowledge of the nature of the classroom interaction in general and the participants' English language use in particular.

In both data recording situations, two researchers conducted the recordings: a principal researcher and a research assistant. The same principal researcher was present at both the EFL and CLIL recordings, but the research assistant was different on each of these occasions. I took part in recording the EFL lessons, but was not present when the CLIL lessons were taped. All of the lessons were thus recorded with two cameras: one focused on the teacher and the other focused on the students.[27] The teacher camera followed the movements and the actions of the teacher, while the student camera was more

[25] The classroom data corpus collected in the English language section in the Department of Languages, University of Jyväskylä consists of 61 lessons (6.3.2007). Out of the 61, 25 are EFL lessons from different school levels (i.e. lower and upper elementary and upper secondary) and the rest are CLIL lessons. The subjects taught in the CLIL lessons are biology, history, chemistry, religion and physics.

[26] EFL lessons: 45 minutes x 10 lessons x two cameras ~ 15 hours + one double lesson that was recorded with only one camera ~ 16h 30min. CLIL lessons: 45 x 12 lessons x two cameras ~ 18h.

[27] Only one EFL double lesson was recorded with the teacher camera as both of the researchers were not able to attend the lesson. Appendices 4 and 5 provide a typical organization of the recorded classrooms and the placement of the cameras in them.

stable and tried to capture the actions of the whole class.[28] However, capturing the actions of the whole class all the time was impossible, and thus, the camera shifted from time to time from one side of the class to the other or to the centre depending on how the students were seated or grouped in the classroom. When the class was engaged in group work, the student camera was used to capture the actions as well as the talk of the nearest group. In the CLIL lessons the class sizes were smaller than in the EFL lessons, and consequently it was easier to capture the whole class with the student camera. In addition to the two cameras, a mini-disc player was placed in each class in front of the first row of students to enhance the transcription process of the students' as well as the teacher's talk.

The choice of which EFL lessons were recorded was based on several criteria. First of all, the participating English language teachers taught several co-occurring courses with divergent themes and activities. This being the case, the decision was made to tape four lessons from one course only per teacher. With three teachers this amounted to 12 lessons altogether. Most of the recorded EFL lessons were double lessons (ca. 90 min.). Secondly, the recorded lessons were consecutive in the sense that they followed one another chronologically in content as well as date. This enabled me to arrive at a comprehensive understanding of the lessons, which further helped in the identification of the different types of activities taking place and the sequences in and through which the activities were structured in the lessons. In addition, only lessons that involved various classroom activities (i.e. individual and group work, reading tasks, checking exercises etc.) were chosen, on the grounds that they would provide interactionally richer data than lessons comprising solely, for instance, writing and listening exercises. In other words, lessons were chosen that required different sorts of interactions from all the participants throughout their duration. Although all these measures were taken before the recordings, it is important to bear in mind that they were only taken to ensure that the data to be analysed would provide as large an array as possible of interactive practices. The lessons and the teachers' lesson plans were not affected by this procedure; on the contrary, the timing of the recordings was decided on the basis of the teachers' course schedules and the content of the lessons, as explicated above.

The CLIL lessons chosen for recording did not go through such a rigorous "selection" process. The timing of the recordings and the subjects to be recorded were decided on the basis of the participating CLIL teachers and their course schedule. The CLIL lessons were also recorded consecutively so that the lessons followed one another chronologically with regard to both lesson content and date. All the CLIL lessons are double lessons (ca. 90 min.) with either 10–15 minutes recess or a lunch break between the lessons. There were thus three recording sessions per subject (i.e. three for biology and three for physics), amounting to 12 lessons altogether. Again, all these choices made in relation to the recording procedure enabled me to form a comprehensive understanding of

[28] NB: Both cameras were placed on a tripod and as such were stationary.

what is going on in the lessons, and thus helped me identify and trace the diverse interactive practices in the data.

In retrospect, the decision to record consecutive lessons has been my lifeline; especially in the viewing, transcribing and analysing of the CLIL data. There are two basic reasons for this. First of all, as I was not present in the recording situation, the recordings were the only foundation I had on which to build an understanding of the topic of the lessons and their relation to each other. The topics were thus cumulatively built throughout the lessons, and served to guide me as an analyst in comprehending not only the interaction that took place, but also the content of what was taught. Secondly, the camera angle was not always the best for my specific research purposes, since the CLIL lessons were recorded for analysing the interaction and the use of language of the participants. The recordings were primarily made with the aim of 'trying to capture as much of the interaction as possible' without any specific interactional focus in mind. As such, there are passages in the CLIL videos that are not usable with respect to, for instance, the teachers' embodied behaviour as the teacher camera did not always meticulously follow the teachers' actions, but was directed towards the students as well. (For a discussion on the limitations of using data collected for other research purposes, see section 4.8.)

4.3.2 Participants

Table 1 contains information on the participants of the present study. It shows the number of teachers and students, their gender distribution and the school level. All in all, there are five participating teachers, who are all native Finnish speakers. Three of the teachers teach EFL lessons and two CLIL lessons. While all the EFL teachers are female, the CLIL teachers are both male.[29]

TABLE 1 Basic information on the lessons of the present data base and the participants.

Lesson	***Course***	***Grade***	***Teacher (gender)***	***Students Boys–Girls***
EFL	Course 3	1st grade	L1 (female)	9–6 (2–1 immigrants)
	Course 5	2nd grade	L2 (female)	6–12
	Course 6	2nd & 3rd grade	L2–3 (female)	12–11
	Subject	***Grade***	***Teacher (gender)***	***Students Boys–Girls***
CLIL	Biology	9th grade	T (male)	3–6 (1 native speaker of English)
	Physics	7th grade	T (male)	0–6

[29] This is an interesting and unintended gender distribution (of subject contents) which I do not address in the present analysis except where the participants make it relevant in their interaction.

The students attending the lessons are of different ages and nationalities. The students in the EFL lessons are mostly Finnish, but there are a few immigrants among them. The age of the students varies from 16–18 years depending on the level of the upper secondary school the students are in.[30] In contrast, the students in the CLIL lessons are from upper elementary level (grades 7 and 9) and their ages vary from 13–15 years. Most of them are native Finnish speakers, but there is one native English speaking boy in the biology lessons.

The group sizes in the two settings differ greatly from one another. Whereas in the CLIL lessons the number of students is 6 for physics and 9 for biology, the group sizes in the EFL lessons vary between 10–22 students depending on absences on a given recording day. The noticeable difference in group size is due to the nature of the settings. In the CLIL lessons, the special nature of learning language through content-based teaching has an effect on how many students volunteer for such a program, and consequently, the number of participating students per school level is small. The difference in group sizes seems to influence at least the way the different classroom activities are carried out in the two contexts. For instance, in the CLIL physics lessons the class carries out several types of hands-on tasks that require space to move around in; this would not be as easily accomplishable in the EFL lessons with their larger number of students.

4.4 Classroom settings

In this section, I briefly contextualize the two classroom settings of the EFL and CLIL lessons. First, I describe the linguistic setting and the individual characteristics of each classroom. This is followed by a summary of the different types of classroom activities carried out during the lessons. This is done in order to supply sufficient information on the nature of the overall interactional context of the lessons that served as the basis for the data analysis.

4.4.1 Linguistic setting

The linguistic setting of the EFL and CLIL lessons is characterized by the presence of two languages: English and Finnish. English is both the vehicle of instruction and the target of learning in the two settings. Finnish is also used in both settings as the vehicle of instruction. The two languages are nevertheless used for different purposes and to a different extent. The use of each language seems to be related to the kinds of classroom activities carried out as well as to specific interactional contexts and to social functions of language use. Below, I

[30] Or on the course they were participating in, as one can no longer definitely tell whether students in a course are of same age, as students nowadays proceed at their own pace from one course to another instead of adhering to the same grade and the same yearly cycle.

first detail the uses of Finnish in the lessons and then move on to the uses of English.

In the EFL lessons, Finnish is employed by the teachers for explaining task procedures, for teaching grammar (particularly the L1 teacher), and for negotiating timetables and changes in the schedule and so forth. The students seem to use Finnish more than the teachers, and they revert to it when engaged in off-task talk, when responding to some of the teachers' questions or when negotiating task accomplishment with each other. For the CLIL lessons, Nikula (2007a, 2008), who has used the same data as I am using here, found that the students use Finnish to signal shifts in stance, to indicate lack of appropriate English language terminology, and to negotiate task procedures with the teacher and with one another. They also use code-switching for interactional and social purposes, for example, addressing the teacher in English, but peers in Finnish. The CLIL teachers, in contrast, do not use Finnish often, and when they do, it is for negotiating vocabulary or on account of the other speaking parties and their use of Finnish (Nikula 2007a, 2008). That is, if one of the students addresses the teacher in Finnish, the teacher might use Finnish in his response, but this does not happen systematically.

In both the EFL and CLIL lessons, English is used by the teachers in assigning classroom activities, in carrying them out, in doing and checking exercises, and in plenary teaching. The students in the EFL lessons use English when responding to the teachers' questions when the class is checking or doing tasks and exercises, and when they are actually accomplishing pair or group work. In the CLIL lessons, students use English basically all the time, except for the particular purposes mentioned above when they revert to Finnish.

In the actual data collection, most of the extracts come from interactional contexts where the participants employ English. There are only a few occasions where Finnish is used, and consequently, the role of Finnish is briefly commented on when discussing the extracts. Otherwise, the use of Finnish is not further explored in the study. The participants', and especially the teachers', use of English is described alongside the other semiotic resources they draw on in constructing their turn-allocation and repair actions. While it is acknowledged that the data are drawn from two different types of institutional situations, where the participants' primary linguistic resource for communication is their second language, English, the participants' identity as second language users is not brought to the fore unless the participants themselves make it relevant in their ongoing interaction (cf. Gardner & Wagner 2005).

4.4.2 Classroom activities

The EFL and CLIL lessons basically comprise of three types of classroom activities: teacher-led, pair/group work and individual work. In the following, the different types of classroom activities and their organization are contextualized.

In both settings, the teacher-led classroom activities include the following: plenary teaching, checking and doing exercises, checking homework, and discussing current course topics. Except for plenary teaching, all of these are mainly structured according to the three-part instructional sequence of the IRE (see also Nikula 2007b). In the EFL lessons, the IRE is, however, more pervasive than in the CLIL lessons and, in the CLIL lessons, there is variation on "the length and complexity of both student responses and teacher follow-up turns" in the use of the IRE (Nikula 2007b: 180). The IRE structure in the CLIL lessons is shown to be dynamically used for divergent pedagogical and interactional purposes. In addition, the CLIL teachers lecture (i.e. teach new content) somewhat more than the EFL teachers, and there is thus more plenary talk in the CLIL lessons (Nikula 2007b).

In the EFL lessons, the teacher-led classroom activities also include listening to and reading texts in English and the teaching of grammar (new as well as old topics). The doing and checking of exercises encompass, for instance, translating sentences, listening comprehension tasks, and cloze tasks for vocabulary and grammar. In principal, all of these can be considered as representations of Seedhouse's (2004) form-and-accuracy context in L2 classroom interaction. That is, the main emphasis in these classroom activities is to get students to produce a specific linguistic formula, expression or grammatically correct sentence, which is then evaluated by the teacher for its appropriateness and correctness. The classroom discussions, in contrast, resemble the meaning-and-fluency context of Seedhouse's (2004) categorization. In the discussions, the main aim is the production of meanings, and mostly personal meanings, rather than on the grammatical accuracy of talk. The individual work is mainly related to checking exercises from key transparencies (in L1's and L2's lessons) and to writing curriculum vitae (in L1's lesson). The pair/group work includes debates and other thematic discussions, reading students' written essays to one another and word puzzle exercises. The first two of the latter are types of classroom activities that according to Seedhouse (2004) would be characterized as meaning-and-fluency contexts, whereas the last one would represent a form-and-accuracy context. Neither the individual work nor the pair/group work are structured according to the IRE sequence, but they have differing interactional organizations.

A characteristic feature of the EFL lessons, and the classroom activities, is a permanent, immobile spatial configuration in the classroom (see Appendix 4 for the spatial organization of the EFL lessons). Most often it is the teacher who stands and moves, paces around the classroom, while the students sit at their desks and do not move. The only time the students move is when they are doing group work, and even then they only turn around in their seats or go to sit next to a friend at the other side of the classroom.

In the CLIL lessons, the individual work involves students doing exercises either from the book or on the basis of teacher-assigned questions. The pair/group work differs from that in the EFL lessons insofar as the CLIL students move around in the classroom while carrying out tasks. For instance, in a biology lesson and in a couple of the physics lessons the students are asked

to go to the blackboard and to explain or write their answers on it, while the teachers wait for the students to finish at the blackboard (sometimes even going around checking individual students' exercise books or notebooks while waiting). After the students have done the exercises on the blackboard, the teacher goes through them one by one and assesses their correctness. The checking of students' responses is not on such occasions organized through the tripartite sequence. Additionally, in the physics lessons, the class does quite a few hands-on experiments in groups as a way of concrete introduction to new theoretical topics. These experiments accommodate a completely different interactional organization when compared to other classroom activities in the biology lessons or in the EFL lessons. These activities have different pedagogical goals, and consequently, their interactional organization reflects this. In Seedhouse's (2004) categorization for the L2 classroom and its interactional contexts, the hands-on experiments in my CLIL data represent Seedhouse's task-based context, where the students carry out the task by themselves and the teacher helps them if they need or request help. Because there is so much group work in the physics lessons, there are not many turn-allocations or repair sequences that take place in and through the IRE sequence. In this respect, the CLIL physics lessons yield only a few turn-allocation and repair sequences.

What is highly characteristic of the different classroom activities in both the EFL and CLIL lessons is that all of them are constructed around, and thus mediated by, various teaching materials (e.g. text books, exercise books, transparencies, handouts, slides, educational videos) as well as by teaching instruments (e.g. CD player, data projector, overhead projector, blackboard, white screen, computer etc.). Jordan and Henderson (1995) refer to interaction that relies on and is driven by the use of artefacts as 'instrumental interaction'. They specify that when "interaction is instrumental, the nature of production tools, display spaces, and other aspects of the material environment significantly enter into the interaction and become an important part of the analysis" (Jordan & Henderson 1995: 65). Although they (Jordan & Henderson 1995: 67) later state that classroom interaction is mainly talk-driven, I suggest otherwise. The analysis will show that the way interaction is sequentially organized is influenced by the mediated nature of classroom activities. The analysis of teacher turn-allocations in chapter 5 and repair practices in chapter 6 will explicate this further.

All in all, both the EFL and CLIL lessons of my data exhibit classroom activities that share two basic features: they are based on the instructional sequence of the IRE and they are mediated by a variety of pedagogical artefacts. The differences in the classroom activities between the lessons pertain mostly to the number of pair/group work activities and their implementation as well as to the nature and amount of plenary teaching. Nevertheless the differences have an effect on the number of sequences selected for analysis. Before moving on to the description of the data collection, I will discuss some of the issues related to transcribing the data and the transcripts themselves.

4.5 Transcription conventions

The data have been transcribed according to established conversation analytic transcription conventions, adapted from Gail Jefferson (see e.g. Atkinson & Heritage 1984; Jefferson 2004) and Tainio (1997). They are described in detail in Appendix 1. The transcriptions have been made by using the audio/video editing program Sound Forge (6.0, 7.0 & 8.0, Sony) to listen to and watch the videos and *MS Word* to compile the transcripts and data collections. Although the transcriptions form the representational tool for reporting the present findings, the analysis has not solely been based on the transcripts. Rather the analysis has been carried out by constantly viewing the video recordings and comparing the events to the transcripts, and by adding important elements into them if something essential has occurred that was not noticed before (see e.g. Edwards & Westgate 1994; ten Have 1999). Transcribing the data has thus been an ongoing process and a methodological tool for reporting on the analysis and the conclusions drawn on the basis of it (e.g. ten Have 1999).

In the transcribed examples, teachers are always identified with a capital T.[31] The extract titles reveal the subject of the lesson from where the extract is taken. The different EFL teachers are separated from one another with the following codes (see table 1 above): L1 stands for the course 3 teacher, L2 is the course 5 teacher and L2–3 identifies the teacher who taught course 6. Their differentiation is thus made on the basis of the school grade and the course the teachers taught. The students, on the other hand, have been given pseudonyms in the transcripts.

Since the present study focuses on the participants' embodied actions and their role in constructing meanings through interaction, the participants' most essential and meaningful embodied actions have been transcribed as well. Although the study of distinct nonverbal behaviours and their role in face-to-face interaction has received growing attention in the past thirty years, systematic notations for their transcription remain to be developed (for similar observations see e.g. ten Have 1999; Heath & Hindmarsh 2002). In earlier research, the notation for gaze has been one of the most systematically portrayed nonverbal resources. It has been annotated by using specific symbols for continuous gaze, for shifting gaze, for non-gaze and for reciprocal gaze (e.g. Goodwin 1981). Otherwise, other nonverbal actions and their description in transcripts have been multifaceted and individual researchers have suggested and implemented various transcription methods. Among these are different types of drawings, symbols, images, and video frames for printed publications (see e.g. Goodwin 1981, 2000a, 2003; Sahlström 1999; Heath & Hindmarsh 2002; Mondada 2006; Carroll 2006; Kidwell & Zimmermann 2007; Haddington &

[31] I have chosen to use the "genderless" T to present the teachers in the transcripts in order to be able to describe teacher practices in general; i.e. the ways in which teachers perform their actions regardless of gender and its potential influence on their practices. My decision to do this also relates to the underlying CA principle that gender is performed by the participants in interaction, and thus needs to be shown through the analysis.

Keisanen 2009). Lately, moving images and small video clips have also been used in addition to transcripts in online publications (see e.g. Büscher 2005).

As for the present study, I have chosen a particular transcription method for my data in which I merely describe the participants' embodied actions verbally as explicitly as I can. I also include in the transcriptions only those actions that the participants seem to treat as crucial in constructing and interpreting each others' messages and that are important in making my argument clearly visible. In some instances, the transcripts are additionally complemented by cropped video frames. In this, I am following, for instance, Kidwell and Zimmerman (2007) and Carroll (2006).

An example of a teacher turn-of-action and the embodied actions of both the teacher and the addressed recipients is provided below to give an idea of the transcription practices of the present study (illustration 1). As can be seen from the extract, the teacher's verbal turn-constructional unit (TCU) is transcribed using the conversation analytic transcription conventions, and the font used is *Times New Roman*. The turn is also marked in bold, as it highlights the target action under analysis. The lines below the verbal utterance show first the teacher's embodied actions, and below it are the actions of the student to whom the teacher addresses his words. The initiation of each action is marked with a bracket {, and it is placed in relation to the teacher's verbal TCU and its temporal production to convey at which point each action begins (sometimes also the ending is marked). The font used for the participants' embodied actions is COURIER in capital letters (font size 10). The example also demonstrates how the title of the extract reveals that it comes from one of the CLIL biology lessons.

ILLUSTRATION 1 Example of the embodied transcription conventions used in the present study.

Biology_not every one of them

20 T **UHH:n::ot every one of them just <u>one</u> at a <u>time</u>. (0.5) °>an an< so.°=**

→ {T POINTS W/ HIS LH TOWARDS THE GIRLS
{T WITHDRAWS POINT
{T LH ROTATIONAL GESTURE
{T BEGINS TO WALK
TOWARDS THE END OF HIS TABLE

→ {OUTI AND KAIJA BEGIN TO WALK TOWARDS THE FRONT
{KAIJA STOPS BRIEFLY AND GAZES TOWARDS T
{OUTI STOPS AND TAKES A STEP BACK
{OUTI REPLACES 2
PAPERS ON HER DESK

(W/ = WITH; LH=LEFT HAND)

In addition to the written explanations of the focal participants' embodied actions (the use and direction of gaze and the different types of gestures) in the transcripts themselves, the extracts are often accompanied by further narrative descriptions in the analysis itself. The narrative descriptions consist of the relevant events and the contextual configuration of the particular extract and the interaction it exemplifies. By including narrative descriptions, I hope to

provide sufficient information for the reader to acquire an adequate understanding of the interactional events and how they are constructed. Describing the events from such multiple perspectives and providing satisfactory evidence for the analysis will, it is hoped, help the reader arrive at the same interpretation of the events as the analyst.

However, transcripts are always necessarily selective insofar as they reflect the analyst's research focus and the claims he or she is making (e.g. ten Have 1999; Edwards & Westgate 1994; Jordan & Henderson 1995). As such, the present transcripts could include a variety of features, such as all the focal interactants' body positions and body movements; however for the benefit of understandability and readability, only the most relevant interactional features have been included. The transcripts are also selective in terms of whose actions are incorporated. In multiparty settings such as classrooms, where the number of participants is large, it is impossible to incorporate all the participants' talk and embodied actions in the transcripts. For this reason, only those participants' actions have been taken into account that bear interactional relevance to the analytic points made.

Most of the interactions in the data extracts are performed in English; there are only few extracts where Finnish is used by the participants. When such extracts are used in the analysis, an idiomatic translation of the meaning of the utterance is provided below the original TCU, before the description of the participant's embodied actions. The translation is given using Arial, font size 10. Idiomatic translation has been chosen for two reasons. First of all, it serves as a sufficient translation of the talk, while at the same time it renders the transcript easily readable. Although a morpheme-by-morpheme gloss is generally the recommended procedure with publications in which the language of the publication is other than the original language of the interaction under analysis (see e.g. ten Have 1999: 93–94; Arminen 2005: 66–67), I have chosen not to include it. Three lines of transcription for talk along with several lines for the different participants' embodied actions would render the transcripts unintelligible. The second reason is the specific focus of the present study on describing the semiotic resources other than talk that the participants make use of, and hence a detailed translation of the linguistic features of the talk is not warranted. For the same reason, the transcribed talk takes the form of unmodified orthography: the linguistic elements are not transcribed according to how they are pronounced. Instead their written form is used (see Wagner & Gardner 2005: 6).

Next, I describe the data collection, its basic quantitative features and what it includes and excludes, and how I was enable to identify some of the essential features of the repair sequences in the collection.

4.6 Data collection

The process of identifying the analytic phenomena for the present study included multiple viewings of the lesson recordings and their transcriptions. The repeated inspection of the recordings helped me gradually notice that the participants, and especially the teachers, had recurrent ways of carrying out particular interactional actions vis-à-vis embodied actions and the use of teaching materials. These actions were the teachers' turn-allocation and repair practices. Their recurrence made me curious about their interactional and sequential import for classroom interaction and its overall organization, and I wanted to explore them in more detail. What would they reveal about classroom interaction that has not been brought up or discussed before?

After the first identification of the analytic focus, I identified and transcribed a little more closely all the turn-allocation instances and repair sequences found in the initial data. Because there were quite a few turn-allocation instances throughout the data, but not nearly as many repair instances, decisions had to be made with respect to what kinds of sequences were to be included in the data collection and from which classroom activities. The final data thus comprises two separate collections: teacher turn-allocation sequences and repair sequences. Each has been compiled according to different criteria, as is explained below.

4.6.1 Turn-allocation collection

For the turn-allocations and their selection, a decision was made to focus on instances that occurred only in teacher-led, whole class activities that were basically structured according to the tripartite IRE sequence in both EFL and CLIL lessons. They seemed to offer the most interesting and systematic observations in terms of their embodied construction and material mediation. They also amounted to a fairly representative and manageable collection of sequences. The collection is representative in the sense that it provides a clear understanding of the different interactional practices of allocating turns to next speakers and of their distribution in the two settings. The focal activities are described in Appendix 2 for the EFL lessons and Appendix 3 for the CLIL lessons. Excluded from the turn-allocation collection are teacher turn-allocations that took place during individual and pair/group work activities in both the EFL and the CLIL lessons. Additionally, the students' self-selections and bids for speaking turns and their semiotic construction have been excluded as the primary interest in this study lies in the teachers' actions and their multisemiotic design. However, the analysis in chapter 6 will address issues related to student self-selection, and therefore, the topic will be briefly addressed in that connection.

The crucial observation that led me to notice the different teacher turn-allocations in the lessons and the range of embodied shapes they manifested

was the fact that sometimes the students began to provide answers to the teachers' questions without there having been a hearable next speaker nomination by the teachers. When I turned to look at the teachers' embodied actions, I realized that on occasion the nominations were solely carried out through different kinds of embodied behaviours. By looking at the students' actions in such instances, it also became clear that they oriented to the teachers' use of the embodied resources as meaningful interactive actions, and produced the relevant next action: the response.

In general, the analysis shows that the teacher turn-allocations in both EFL and CLIL lessons are constructed in multiple ways. Primarily they are constructed by using person references, i.e. the student's name, together with a gaze directed towards the incipient next speaker. There are also verbal turn-allocations that are either accompanied by head nods or pointing gestures. However, some turn-allocations are performed only by embodied means (i.e. head nods or pointing gestures).

Table 2 presents the approximate number of turn-allocations that are part of the present data collection. However, it only displays the overall number of the turn-allocations performed through the use of gaze, head nods and pointing gestures. I have not differentiated the turn-allocations according to whether they are accompanied by verbal elements or not. The table is therefore organized according to the primary embodied means used, whether it is gaze, a head nod or a pointing gesture. What is essential to remember is that head nods and pointing gestures always embody the use of gaze.

TABLE 2 The number of turn-allocations performed through gaze, head nods and pointing gestures.

	EFL	CLIL	***Total***
Gaze	283	28	***311***
Head nod (+ gaze)	42	2	***44***
Pointing gesture (+ gaze)	15	6(1)	***21(1)***
Total	***340***	***36(1)***	***376(1)***

As the table shows, the data collection consists of more than 370 turn-allocations, of which over 300 are performed by using gaze; more than 40 by head nods and about 20 by pointing gestures. The table reveals how there are comparatively more turn-allocations altogether in the EFL lessons than CLIL lessons. This is basically due to the difference in the amount of IRE-based activities and activity sequences in the two settings and in the notable prevalence of plenary talk segments and hands-on experiments in the CLIL lessons, as mentioned above.

The table also demonstrates the noticeable difference between the settings in the number of head nods and pointing gestures as turn-allocation devices as well as the difference in turn-allocations produced through the use of gaze. Naturally, both head nods and pointing gestures as turn-allocation devices include the use of gaze, but as turn-allocation devices they are not as common as the use of gaze as an accompaniment to verbal turn-allocations. With respect

to pointing gestures, one turn-allocation in the CLIL lessons is marked in parenthesis as it includes both a head nod and a point, and I have not wanted to count it twice (the turn-allocation is discussed in section 5.4.2 as example 28). In addition to the above mentioned differences, there are also differences in the frequency with which individual teachers use head nods and pointing gestures as means for turn-allocation. These differences will be addressed briefly in chapter 5.

4.6.2 Repair collection

With regards to repair sequences and their selection, a decision was made to focus on classroom activities where the class is accomplishing or carrying out different types of tasks in both EFL and CLIL lessons. For the EFL lessons and the CLIL biology lessons, these basically comprise all the teacher-led activities that are structured according to the tripartite instructional sequence and that are mediated by different teaching materials and instruments. Excluded from the repair collection in the EFL lessons are the teaching of grammar, and individual and pair/group work activities. From the CLIL biology lessons I have also excluded individual and pair/group work activities. None of the repair sequences come from the CLIL physics lessons, since there were not many classroom activities or individual activity segments organized through the IRE sequence. There were repair actions that occurred in activities with diverging sequential organizations, but such repair sequences are beyond the scope of the present study. The classroom activities from which the repair sequences of the current data collection occurred are described in Appendix 2 for the EFL lessons and Appendix 3 for the CLIL lessons.

Table 3 presents the total number of repair sequences from IRE-based activities in the EFL and the CLIL lessons. When looking at the table, it becomes clear that the total number of sequences is strikingly lower than that of the turn-allocations. This is on account of the smaller number of classroom activities that have been taken into consideration in the repair analysis. But in comparison to the turn-allocations, the length of the repair sequences is generally longer and the teachers draw on several semiotic resources concurrently. The phenomenon of repair is therefore somewhat more complex in terms of the multisemiotic design.

TABLE 3 The number of repair sequences in the EFL and CLIL lessons.

	EFL	CLIL	***Total***
IRE-based activities	*27*	*7*	***34***

The character and construction of the repair sequences in the IRE-based activities is somewhat different from the construction of turn-allocations, and this warrants a procedural explanation of how I came to identify and consider them as repair actions. As I watched and transcribed both the teachers' and the students' actions lesson after lesson, activity after activity, I gradually began to notice that the teachers systematically organized and accomplished their

positive evaluations in the third turn of the IRE sequence through the use of the teaching materials and instruments (also Seedhouse 2004; Pehkonen 2008). In addition, it became clear to me with further observation that different classroom activities, because they were mediated by different combinations of the teaching materials and instruments, manifested slightly diverging teacher third-turn practices. My next question was, how did the teachers carry out their negative evaluations and how did their design differ from the positive ones? In other words, how is interaction organized when the student answer is not what the teacher is expecting: how does the teacher mark the response as wrong or not the sought-for response? How do teachers initiate repair in that instance? A further round of observation showed that the construction of the teachers' negative evaluations deviated quite distinctively from the positive ones. More importantly, teachers oriented towards problematic student turns differently than to correct ones, and consequently repair was either initiated or performed. The differences in the teachers' positive and negative orientations led me to the findings presented in chapter 6.

Considerations on quantification

Whilst the tables 2 and 3 provide quantitative information of the turn-allocation and repair sequences and their occurrence in the data, they are only presented here in order to give an understanding of the scope and general distribution of the interactional phenomena under study. The primary aim of this study, in accordance with CA principles, is to explore and qualitatively describe the interactants' situated, interactional practices and how they shape and are shaped by the unfolding interaction, not to draw broad quantitative generalizations about those practices (see e.g. Schegloff 1993; Psathas 1995: 3; Kidwell & Zimmerman 2007). Because the participants' embodied actions and how they are used together with other semiotic resources to construct meanings vary a great deal in the action-by-action level of interaction, no far-reaching generalizations of their use can be made. In other words, the qualitative description seeks to chart the different embodied resources used and their interactional import and sequential place of occurrence (cf. Schegloff 1993). The analysis will show that the use of the different semiotic resources is a context-specific praxis, on one hand framed by, and on the other hand enabled by, the complex material and spatial configuration of the classroom as well as by its multiparty setting.

Nevertheless, in chapter 5 I provide some quantitative figures indicating how frequently particular types of turn-allocation devices are used, as there are quite a few of them altogether in the data. In chapter 6, no figures are provided on the frequency of occurrences of the different repair phenomena in the data. There are two reasons for this. First of all, there are not many repair sequences overall in the data, and therefore not many representations of the individual phenomena. Secondly, in many of the sequences the different phenomena investigated overlap, thereby rendering their quantification difficult.

4.7 Considerations on ethical issues

Since the aim of the present study is to describe real, everyday classroom interaction by observing naturally occurring classroom lessons with a particular focus on the participants' sense-making practices, a couple of issues related to research ethics merits discussion. These issues are related to research consents and to participants' rights and obligations as well as their anonymity.

As mentioned above, the data for the present study originate from two different research projects. At the time of the recordings, in both projects, the participants were only informed that the researchers were interested in daily classroom interaction. The teachers were also told that the purpose of the research was not to evaluate their performance, but to describe what happened and how in the classrooms. More specific details of the focus of the research projects were not mentioned. This was done in order not to make the participants too self-aware of their ways of doing things in the classroom.

Because the recordings were made for different projects, their research permissions differ from one another. With the EFL data, only the teachers were asked to give their written consent for the recordings, as their actions – both verbal and nonverbal – constituted the researchers' primary interest. The students were not asked for their written consent, and their actions were only recorded in order to capture classroom interaction as fully as possible, i.e. both teachers' and students' reciprocal actions. It was agreed that the student video recordings were only to be used for the analysis and transcription of the data by the researchers: they were not to be shown in conference presentations or for teaching purposes. With regards to the teacher video recordings, permission to show short clips for teaching purposes and for conference presentations and data sessions was obtained. For the CLIL data, the teachers gave their written consent for the recordings, while the students' parents were sent a letter informing them about the recordings and asking them whether their child could participate in the study. If the parents did not agree to this, they were to notify the teacher who would then tell the researcher. All the parents agreed that their child could participate in the study. The consent for the CLIL lessons covered the use of the data for teaching as well as for conference and other purposes. Some years after the recordings, the CLIL teachers also gave their consent for stills to be included in publications, on the condition that the teacher's identity would not be immediately recognizable. The EFL teachers have not been asked for such permission. For both recordings, EFL and CLIL, the participants were informed that if they did not want to take part (there were no refusals), they were to tell the researchers so that measures could be taken to comply with their request, e.g. not including non-participants in the recordings.

To protect the participants' identity, the students are given pseudonyms in the transcripts. The names have been constructed so that they maintain the ethnicity of the name, if possible (e.g. if the student's name originally was Matt, then a pseudonym might be James). Teachers are referred to merely by the

letter T in the transcripts. All possible indications of the geographical location of the school and other features that could potential make the recognition of the participants possible have been erased from the transcripts. Any pictures that are used have been edited to protect the teachers' identity by blurring their faces. This has been done in such a fashion as to enable display the participants' use of gaze, or more specifically, its direction.

4.8 Reflections on the data and the methodological framework

The methodological approach of the present study was chosen in order to obtain as naturally occurring interaction as possible and to be able to describe the various, minuscule multisemiotic resources interactants employ in their meaning making as they themselves use and interpret them as the interaction unfolds. Nevertheless, no data gathering process or analysis conducted on the basis of that data are without their limitations, and therefore, discussion of some of the weaknesses of the present research methodology is warranted. I will begin this discussion with the data recording process and transcripts, and close the discussion by commenting on the data collection.

As was already mentioned above, the lessons that form the present data base were recorded with two cameras. The cameras were operated by two researchers, who are not a natural part of the everyday classroom setting. The intrusiveness of their presence in the situation and their possible influence on the participants' actions cannot therefore be overlooked. This issue of 'observer's paradox' (e.g. Edwards & Westgate 1994: 77–78) requires some reflection.

While the researchers with their cameras tried to act as unobtrusively as possible during the recordings, the videos show that their presence was explicitly noted by the participants (see also Jordan & Henderson 1995: 55–56). For example, two of the EFL teachers (L1 and L2) made explicit remarks to the class about the cameras and the fact that the researchers wanted the recordings to as natural as possible. The teachers thus acknowledged the presence of the cameras and the researchers in the situation, but did not make a fuss about it. The students, in contrast, were seen to explicitly look at the cameras and talk about them in some of the lessons (e.g. in a CLIL physics lesson). Yet all of these instances were short and seemed not to affect the participants' actions greatly. Jordan and Henderson (1995: 55) point out that "[e]xperience shows that people habituate to the camera surprisingly quickly" and that "[w]here people are intensely involved in what they are doing, the presence of a camera is likely to fade out of awareness quite rapidly." This is what seems to have taken place in the present lesson recordings. On the other hand, the researchers' influence on the participants' conduct is rather difficult to determine as no prolonged observations of the classes and their everyday interaction were made. That is, no information on how the classes behaved without the presence of the cameras

was available. However, when the EFL teachers were asked about this at the time of the recordings, they thought that the classes behaved the same way during the recorded lessons as in other lessons.

The data recordings themselves and their quality need to be mentioned insofar as these have had an effect on the (level of) access to the participants' embodied actions and, on that account, on the quality of the data collection. As I began to transcribe the recordings more closely from the point of view of embodiment, it soon became clear that the recordings were not perfect as there were occasions when the teachers either were not in view of the camera at all or their bodies (mostly heads) were hidden by the students' heads or by various objects. Although the teacher cameras were positioned so that most of the teachers' actions were caught in the recordings and while the camera operators tried to follow the movements of the teachers as closely as possible, following the teachers' actions was not always possible as the researchers were not able to anticipate the participants' successive actions as quickly as they took place (see also Mondada 2006). A similar drawback happened with the student camera: not all the students fitted into the student camera viewfinder (especially with the large EFL classes), and thus on quite a few occasions it is impossible to say what a particular student is doing as the camera either was not aimed towards that part of the class where the student sat or then the student was blocked from view.

Consequently, the present data collection is 'imperfect' in that not all transcripts of the turn-allocations and repair sequences include all the relevant and necessary actions of the focal participants. The sequences in which something is lacking from the transcripts are explicitly pointed out, if they are used in the analysis, and care has been taken not to read too much into the observations on the basis of such data extracts.

The main reason for the 'incomplete' transcripts is essentially due to the two research projects for which the recordings were made and the difference in their primary research purpose. The recordings of the EFL lessons were made in order to observe teachers' embodied actions in addition to the overall classroom interaction, whereas the CLIL lessons were recorded in order to collect interaction in general. This means that the teacher cameras did not follow the CLIL teachers in the CLIL lessons as strictly as possible; instead they focused more on the students. Not being able to systematically observe specific recurrent phenomena throughout a recording is a serious drawback when using data that has been originally recorded for other purposes. Hence, while the EFL lessons were taped with a particular focus on embodiment in mind, they also include sequences where the transcriptions are 'incomplete' with respect to the present analytical observations. The decisions camera operators make in any recording situation inevitably affect the quality of the data, and no recording can be perfect. Something is always lost whether it is the doing of the camera operator or the equipment itself (Jordan & Henderson 1995: 53).

5 TEACHERS' EMBODIED TURN-ALLOCATION PRACTICES

The present chapter concentrates on describing teachers' turn-allocation practices and their embodied construction. Teacher turn-allocations are understood as turns-of-action used to nominate the next speaker: the student who is to provide a response to a question posed by the teacher. The focus will therefore be on the 'current speaker selects next' technique of the turn-taking machinery (Sacks et al. 1974) and its institutional representation. Mehan (1979: 84–95) has termed classroom next speaker turn-allocations as 'individual nominations' in which teachers nominate next speakers by using a student's name either as part of an initiation of the IRE sequence or on its own as a separate interactional task. According to Mehan (1979: 84), such individual nominations can also include the use of gaze, head nods or pointing gestures. The present analysis details how such embodied resources are used in allocating turns to students, in what kinds of turn constructions they are employed, in what kinds of sequential and interactional contexts they are drawn on and what kinds of actions they can project with respect to the unfolding interaction.

Quite a few classroom interaction studies have referred to the use of gaze, head nods, pointing gestures and other embodied resources as means for nominating students as next speakers (e.g. McHoul 1978; van Lier 1994; Hall 1998; Margutti 2004; Karvonen 2007; Mortensen under review). But despite the recurrent observations across several decades of the role these embodied resources play in teacher turn-allocations, only two studies to date have further identified their role in the management of speaker change in classroom interaction. They have described some of the interactional sequences or activity contexts where teachers employ embodied resources as turn-allocation devices. Mehan (1979: 84) observed that the teacher in his study used gaze, head nods or pointing gestures to re-nominate a particular speaker already once nominated by the teacher verbally, i.e. to continue in the role of the current-respondent. The teacher thus employed nonverbal resources as a floor-holding technique for the already-selected speaker. Mortensen (under review), on the other hand, has

shown that embodied actions like gaze, and also pointing gestures, require that the participants are physically co-present in order to understand that a next speaker nomination is taking place. Additionally, he argues that students display willingness to be next speakers by directing their gaze towards the teacher, thus enabling the participants to establish mutual gaze. By averting their gaze from the teacher, students disclose that they are not available as next speakers (Mortensen under review). The present study not only corroborates these findings and further expands and elaborates on them, but also yields opposite findings.

The analysis will show that teacher turn-allocations take a variety of forms that incorporate both verbal elements and such embodied means as the use of gaze, head nods and different types of pointing gestures. The verbal form of teacher turn-allocations vary from students' names to discourse particles (e.g. 'so') to longer stretches of talk (e.g. phrases or sentences). On occasion, the turn-allocations are constructed so that both verbal and embodied elements are used simultaneously in a variety of combinations. The turn-allocations can also consist merely of embodied actions, i.e. no verbal turn-constructional elements are used. The different types of embodied turn-allocation devices and the role of linguistic resources in teacher turn-allocations will be described more closely one by one in the sections below. But before I will present the analysis, I will demonstrate the prototypical turn-allocation procedure encountered in the data (section 5.1). This is followed by an analysis on the use of gaze and its role in different types of turn-allocations (section 5.2). How head nods are used as a means for turn-allocation is described in section 5.3 and the use of pointing gestures is discussed in section 5.4. The findings of the present chapter are drawn together in section 5.5.

5.1 The prototypical teacher turn-allocation in the IRE sequence

The description of teacher turn-allocation practices in the present study focuses on classroom activities that have primarily been organized according to the basic tripartite instructional sequence – the IRE sequence. Prototypically interaction in the IRE-based activities is organized so that the teacher initiates the sequence with an initiation, a first-pair part. The initiation can take different forms and can consist of a single TCU or multiple TCUs. It also functions as a summons for students to bid for a response turn, a second-pair part (see also Routarinne 2008: 426). Sequentially, the 'base adjacency pair' (Schegloff 2007), the 'teacher initiation–student response' pair, is not directly adjacent as the insertion sequence consisting of student bids and teacher turn-allocation takes place before the response is produced (see also Mehan 1979: 92; Sinclair & Brazil 1982: 50; Lemke 1990: 8; Karvonen 2007: 122; Niemelä 2008: 118). The 'teacher initiation–student response' adjacency pair therefore remains the primary activity sequence, while the insertion sequence is performed in order to be able

to move the IRE sequence on (cf. Schegloff 2007: 99), hence the instruction. In fact, the student response turn is generally not produced until the teacher has selected and allocated the response turn to the next speaker. When compared to ordinary conversations, this implies that the insertion sequence 'student bidding–teacher turn-allocation' is rendered conditionally relevant in classroom interaction. Example 1 demonstrates a characteristic sequential organization of a basic IRE-based activity sequence, in which the student bids and the teacher turn-allocation have been included.

(1) English_L2_Liilia

1	T	omistaa sosiaalinen omatunto having a social conscience {T GAZE DOWN AT TP {T GAZE SHIFT TO CLASS {LIILIA GAZE DOWN AT HER BOOK	**Initiation**
2		(1.3) T SHIFTS GAZE FROM LEFT TO RIGHT SLOWLY[32] LIILIA RAISES HER HAND GAZE DOWN AT HER BOOK	**Student bidding + T selecting next speaker**
→	T	**Liilia.** **{T GAZE TOWARDS LIILIA** {LIILIA GAZE DOWN AT HER BOOK {MIKKO RAISES HIS HAND	**Turn-allocation**
4	Liilia	having a social conscience. {LIILIA GAZE DOWN AT HER BOOK {LIILIA GAZE TOWARDS T {T GAZE TOWARDS LIILIA {T GAZE DOWN TOWARDS TP	**Response**
5	T	°that's right.° {T GAZE DOWN TOWARDS TP {LIILIA GAZE DOWN AT HER BOOK	**Evaluation**
6		(2.5) T REVEALS THE CORRECT ANSWER ON THE TP	

The extract begins with the teacher initiating an activity sequence with a prompt in line 1. As the initiation also functions as a summons for student bids, it projects the forthcoming student selection and next speaker turn-allocation by the teacher. The student bids occur during the silence in line 2 (and also in line 3 when the teacher is already allocating the turn to Liilia). During the silence, the teacher scans the class from left to right looking for potential next speakers. At the same time Liilia raises her hand, thus showing her willingness to be selected as the next speaker. In line 3, the teacher allocates the response turn to her by uttering her name and gazing towards her. In line 4 Liilia provides the response. The sequence is closed as the teacher evaluates Liilia's answer positively (line 5) and also reveals the correct answer on the transparency (line 6).

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32 When I talk about teacher actions in terms of their gaze being directed towards the left, centre or right side of the class, I am taking the teacher's perspective and viewing the classroom through her/his eyes. I thus imagine myself at the front of the classroom facing the students.

The example clearly demonstrates how the insertion sequence of 'student bidding–teacher turn-allocation' is highly characteristic and consequential for the institutional interaction of the classroom with its multiparty setting. In any IRE sequence, several students can be competing for the same response turns and teachers need to select one speaker from the (possibly) several possibilities without forgetting to distribute turns in equal measure to all students (cf. Sahlström 1999). More importantly, within prototypical IRE sequences the insertion sequence partially takes place during the silence after the teacher's initiation. The silence is then not void of action. Rather there are several overlapping actions taking place during it: the student hand raising, the teacher search for a potential next speaker and the teacher selection of that speaker. For this reason, I have chosen to call the 'temporal duration' (McHoul 1978) silence instead of a pause, as the term pause implies that action has ceased momentarily, which is definitely not the case here (see also Carroll 2006). The insertion sequence also explicitly manifests the participants' understanding of each others' actions in terms of what is expected of them at any point in the emerging interaction. By raising their hands students indicate that they have understood the teacher initiation to be sequentially implicative for them in that it has made the response turn conditionally relevant, but before it can be actualized, students are to bid for the response turn and the teacher is to select and nominate the respondent. Routarinne (2008: 426) considers the insertion sequence as the interactional site for participants to display their understanding of and orientation to the ongoing interaction and its structural organization.

While this type of sequential organization is highly characteristic for my data, the analysis will show that the sequential ordering of teacher and student turns-of-action is not consistently actualized in such a rigid order. Rather it is realized through a variety of sequential constructions and overlapping turns-of-action by both teachers and students. Student bids, for instance, quite often coincide with teacher initiations (or teacher evaluations), which in turn lead to teachers allocating turns to students without long silences emerging between the initiation and the response actions (also Sahlström 1999; Lehtimaja 2007; Niemelä 2008; Mortensen under review). The way the interaction unfolds after the first sequential element, the initiation, is dependent on the participants' emerging actions, and the management of speaker transfer is therefore a 'member's problem' (Mortensen under review) in need of negotiation there and then. The construction and organization of turn-taking is therefore locally managed as the next speaker selection and turn-allocation are accomplished on a moment-by-moment basis through the sequentially unfolding interaction.

5.2 The use of gaze in turn-allocations

In classroom interaction, the most prevalent embodied resource teachers employ in allocating turns to students is the use of gaze. The teacher's gaze is

always directed towards the selected next speaker at some point during the turn-allocation procedure: either the selection or the nomination of the incipient next speaker. In fact, the teacher's gaze towards the class is a prerequisite for finding a (new) respondent. Not only is the teacher's gaze directed towards the selected next speaker, but the selected student's gaze can also be directed towards the teacher at some point during the turn-allocation procedure (see also Sahlström 1999: 94–95; Niemelä 2008; Mortensen under review). Mutual gaze between the teacher and the selected next speaker is essential, but not obligatory, for establishing recipiency as well as for finding an available and willing respondent (see McHoul 1978; Mortensen under review, 2009). However, mutual gaze is not always a prerequisite when teachers nominate next speakers through both verbal and embodied means, as will be shown below. Nevertheless, it can be said that gaze is generally an essential component of all types of turn-allocation techniques and is used together with verbal address terms, sequentially implicated turns, head nods (see section 5.3 below) and pointing gestures (see section 5.4 below) or with a combination of all or some of them. In the following, I will focus on illustrating the range of gaze trajectories teachers employ when allocating response turns to students through verbal TCUs. I will, however, first provide some essential background information on the use of gaze and its role and interactional functions in naturally occurring interactions as well as its role in the negotiation of shifting participation frameworks.

Research on eye gaze behaviour has suggested that there are two primary functions for gaze and its use in social interaction: the monitoring function and the regulatory function (Kendon 1990: 81–86, 1967: 53–57). These categorisations seem to be rather straightforward, but multimodal interaction research on naturally occurring interaction has revealed that the operations behind them are multifaceted and contingent on the participants' behaviour and the temporal and sequential organization of talk-in-interaction. The monitoring function is related to how speakers observe the recipients' actions and displays of co-participation during the production of the speaker's turn-of-action and how these influence the speaker's action production. The speaker may, for example, seek a confirmation or a sign of orientation from the recipient, i.e. use gaze as a resource to check that the recipient is not only listening and understanding the talk, but also displaying co-participation with and attentiveness to the speaker's current action (e.g. Goodwin 1981, 1984, 1986; Kendon 1990; Streeck 1993). In classrooms where teachers are waiting for more hand-raises and not allocating turns to first bidders (e.g. Sahlström 1999: 99–107), this monitoring function can help the teacher seek more candidate next speakers. It also serves to guide the teacher's attention to the students' level of recipiency and to the students' current actions and orientations as well as to finding students who are displaying their availability as potential next speakers.

The second function of gaze, the regulatory function, serves to guide the recipient to what kinds of actions are made relevant at particular moments in the interaction, whether these relate to displays of recipiency and affiliation vis-à-vis the speaker's current action, to soliciting co-completion in word searches

or to organizing turn-taking (Goodwin 1981; Goodwin & Goodwin 1986; Kendon 1990: 81–86; Lerner 2003; Carroll 2006). In terms of the organization of turn-taking, speakers signal through their direction of gaze the recipient of their current turn (Goodwin 1981; Seppänen 1998: 170). Speaker's also employ gaze as an explicit addressing device when speakers select next speakers (Lerner 2003; also Sacks et al. 1974). The use of gaze is therefore a social activity in itself in that speakers and recipients purposefully use it in their action production (Goodwin 1981) and, for this reason, gaze plays a crucial function in synchronizing the participants' actions in interaction (Haddington 2005: 97).

In terms of turn-taking and participation in ordinary conversations, the transition relevant place (TRP) is an important interactional site, as it is here that the speaker's gaze is used to solicit the recipient's engagement through mutual gaze in order for the turn-transfer to be accomplished successfully. By engaging in mutual gaze at a TRP, the participants not only display their orientation towards the sequential relevance of speaker transfer, but they simultaneously begin to negotiate a shift in their participant positions. They re-construct their ongoing participation framework partially through the use of gaze as well as through other semiotic resources available to them in the situation (Goodwin 1981, 2000a, 2003; Goodwin & Goodwin 2004). The participation framework is viewed as "an ongoing contingent accomplishment, something not under the control of a single party …, but rather something that has to be continuously achieved through [the participants'] public displays of orientation within ongoing processes of interaction" (Goodwin 2000a: 1500). It is thus something that is constantly negotiated and reflexively structured through the emerging interaction.

Seppänen (1998: 153–206), for instance, has demonstrated how speakers employ their direction of gaze to establish different types of participation frameworks in everyday multiparty conversations. She has shown how the speaker's gaze together with the use of personal and demonstrative pronouns to refer to other people indicate to the co-participants the participation status of the referred-to person in the prior discourse, and thus the role that is assigned to the referent in the ongoing talk. That is, the speaker's direction of gaze with respect to the referent builds different types of participation frameworks, where other participants are constructed either as addressed recipients, as listeners or as part of the ongoing talk and its character world.

In institutional interaction, teachers direct their gaze towards students when selecting and nominating them as next speakers, and by so doing they mark explicitly that the addressed recipient of the turn-allocation is the gazed-at student. Thus, the teacher's gaze alongside other indicators shapes the participation framework in the class so that a primary participation framework is constructed between the teacher and the nominated student, while the other students remain ratified recipients of the emerging talk.

5.2.1 Gaze and a verbal address term

As was mentioned above, teachers' gaze is directed towards the selected next speaker in most turn-allocations in my data, and as such it indicates that the gazed-at person is also the addressed recipient of the turn-allocation (see also Niemelä 2008; Lerner 2003; Seppänen 1998). Example 2 illustrates the basic type of turn-allocation sequence that occurs in my data in activities structured according to the basic instructional sequence and the teacher's gaze trajectory during it. It consists of two IRE sequences and it comes from an EFL lesson from an activity where the class is going through a list of words the students have had to identify in English from a text they have just listened to. The right answers are presented one by one on a transparency. Consequently, the students' attention is divided between several entities: the book (i.e. the text), the screen where the answers are projected, and the teacher. In the first activity sequence two students raise their hands, and in the second sequence, only one student raises her hand.

(2) English_L2-3_Eeva + Ulla

23	T	uh varmistaa turva↑ta uh to secure {T GAZE TOWARDS THE SCREEN {T GAZE SHIFT TOWARDS THE CLASS
24		(0.5) EEVA & ULLA RAISE THEIR HANDS LOOKING TOWARDS T T LOOKS STRAIGHT AT CLASS, slightly more towards the right side
→	T	**Eeva** **{T GAZE TOWARDS EEVA** {EEVA GAZE TOWARDS T
26	Eeva	secure. {EEVA GAZE TOWARDS T
27	T	T NODS SLIGHTLY LOOKING DOWN AT TP °exactly° (0.5) {T REVEALS THE ANSWER
28		(uh) rikastuttaa (uh) to enrich {T GAZE DOWN AT TP {T GAZE SHIFT TO CLASS {T GAZE SHIFT TO CENTRE OF CLASS
29		(0.8) T LOOKS STRAIGHT AT CLASS, now more towards the centre ULLA RAISES HER HAND LOOKING TOWARDS T
→	T	**Ulla** **{T GAZE TOWARDS ULLA** {ULLA GAZE TOWARDS T
31	Ulla	to enrich. {T GAZE DOWN AT TP
32		(1.1) T LOOKING DOWN AT TP, THEN REVEALS THE ANSWER
33	T	right. {T TURNS TO LOOK AT SCREEN

As the example shows, the teacher first initiates the sequence by topicalizing the next word the students need to translate (line 23). Having done this, the teacher

looks at the class waiting for student bids (line 24). The teacher holds her gaze steady, directing it slightly more to the right side of the class. Eeva and Ulla, who are both bidding, are sitting on the right side. In line 25, the teacher allocates the response turn to Eeva. The allocation is designed so that it includes the name of the student and a gaze directed towards the student. However, as the teacher's direction of gaze has been established during the silence in line 24 towards the right side of the class, it is not altered here in any way. The teacher as she continues to look at the same direction is able to see that Eeva is bidding for a turn and she is thus able to nominate her without changing her gaze trajectory (line 25). The same sequence of steps is taken in lines 28–31 with the next word on the list and the ensuing next speaker selection and turn-allocation. In both cases, both participants, the teacher and the selected next speaker, establish mutual gaze – or there is the possibility for it – as both are looking towards each other. In both sequences, it is also the case that the students direct their gaze towards the teacher when they raise their hands (also Sahlström 1999: 95).

Example 3 from a CLIL biology lesson further illustrates how teachers direct their gaze towards the selected next speaker when allocating response turn to students. The example also shows how students direct their gaze towards the teacher when raising their hands and answering. In the example, two students raise their hands.

(3) Biology_Aino

1	T	ovum. (1.8) what are the possibilities for that. {T GAZE TOWARDS BL, BACK TURNED TO CLASS {T TURNS TO FACE THE CLASS AND TAKES A FEW STEPS CLOSER {REIJA HAND RAISE, GAZE TOWARDS T {AINO HAND RAISE, GAZE TOWARDS T
2		(2.9) T STANDING LOOKING AT CLASS REIJA AND AINO GAZE TOWARDS T, HANDS RAISED
→	T	**Aino** **{T GAZE TOWARDS AINO** {AINO GAZE TOWARDS T
4	Aino	>°w°< (0.4) an LITTLE w. {AINO GAZE TOWARDS T {T GAZE TOWARDS AINO {T TURNS TO WALK TO THE BL
5		(3.4) T WALKS TO THE BL AND WRITES THE ANSWER ON IT

In addition to illustrating how the teacher's gaze is focused towards the selected next speaker, example 3 provides evidence of how the interaction is organized sequentially. In other words, it exemplifies the prototypical IRE sequence, in which the insertion sequence 'student bidding–teacher turn-allocation' takes place. However, here the students' bids co-occur with the teacher initiation. In addition, the teacher's turn-allocation is also a separate turn-of-action constructed through both verbal and embodied means. There is also a rather

lengthy silence between the initiation and the turn-allocation. In general, the length of the silence varies in different pedagogical sequences.[33]

As the above examples demonstrate, the identification and recognition of the next speaker is made both through the use of the address term and the use of gaze. More importantly, the teacher and the selected student also seem to engage in reciprocal gaze, thus displaying to each other through their engagement their understanding of the fact that a speaker change is taking place. In everyday multiparty interactions, mutual gaze is especially relevant when the turn-taking is locally managed as the interaction unfolds, as through the use of gaze the interactants build and display their understanding of the next speaker. Mutual gaze is crucial, particularly if no other explicit addressing devices are used. Lerner (2003: 180) points out that in ordinary, informal interactions "gaze-directional addressing is vulnerable to the looking/glancing practices of recipients." What he is referring to is that it is essential for all the participants to have visual access to each others' actions in order to get an understanding of what is taking place in terms of the turn-taking organization when only gaze is being used to identify the intended next speaker.

In classrooms, however, it is generally the case that of the large group of students most or some of them are not directing their gaze towards the teacher all the time (also Sahlström 1999; Mortensen under review). When students need to divide their attention between different pedagogical artefacts in the classroom environment such as their own books, the screen and the teacher, the focus of students' gaze is often divergent. Some might be gazing towards their books, while others might be gazing towards their neighbours and yet others towards the teacher. In other words, available to students are a variety of resources that they can draw on to display the particular status of their participation towards the ongoing events (Sahlström 1999; Mortensen under review). What happens then when the teacher is facing a non-gazing student who is nevertheless displaying attentiveness and recipiency to the ongoing interaction and to the specific interactional task of speaker transfer that has been made relevant?

There are instances in my data where the selected speaker is not or has not been looking in the direction of the teacher even though he/she is bidding for a turn, thus displaying willingness to respond. Example 4, like example 1 above (section 5.1), illustrates a turn-allocation where there is no mutual gaze between the teacher and the selected student. The extract comes from an EFL lesson. The class is checking an exercise, which is in the students' book, with the help of a transparency. The exercise consists of sentences with empty slots in them: the students have to fill in the slots with appropriate verbs and verb forms. Ulla seems to be the only one to raise her hand, and most students are looking down at their books.

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[33] There must be several interactional reasons for the variation in length; these are, however, beyond the scope of the present study. However, one of them is most likely the fact that teachers wait for several students to bid before they nominate next speakers, thus affording several students the opportunity to participate (although see Sahlström 1999).

(4) English_L2-3_Ulla

1	T	number ↑two {T GAZE SHIFT DOWN AT HER BOOK {ULLA GAZE DOWN AT HER BOOK
2		(5.8) T FIRST LOOKS DOWN AT HER BOOK, THEN AT CLASS AND THEN TOWARDS THE SCREEN MOST STUDENTS LOOKING DOWN AT THEIR BOOKS ULLA GAZE DOWN AT HER BOOK
3	T	you are sup↑posed to find verb that means the same as to record. (0.8) {T GAZE SHIFT TOWARDS THE CLASS {T GAZE DOWN AT BOOK{T GAZE UP TO CLASS {T SMALL HEAD SHIFT TOWARDS THE RIGHT SIDE OF CLASS {ULLA GLANCES UP TOWARDS T {ULLA GAZE DOWN AT HER BOOK ***{ULLA RAISES HER HAND LOOKING DOWN AT HER BOOK***
→	T	**Ulla** **{T GAZE TOWARDS ULLA** ***{ULLA LOOKING DOWN AT HER BOOK***
5	Ulla	Christian monks, later wrote down early Anglo-Saxon °(oral poems) {ULLA GAZE DOWN AT HER BOOK, READING FROM THE BOOK {T GAZE DOWN TOWARDS TP
6		in the quiet of the monasteries.° *{ULLA GAZE SHIFT TOWARDS T*
7	T	°hm↑m° {T GAZE DOWN TOWARDS TP {ULLA GAZE TOWARDS T/SCREEN
8		(6.5) T FIRST LOOKING DOWN AT TP, THEN SHIFTS GAZE TOWARDS THE SCREEN

Although the teacher directs her gaze towards the selected speaker at the end of line 3 and in line 4 when she allocates the turn to Ulla, Ulla's gaze is directed down at her book. Ulla briefly glances towards the teacher in line 3, after which she raises her hand. Otherwise Ulla's gaze orientation is towards the book. She only raises her gaze towards the teacher at the end of the TCU in line 6. Her gaze shift towards the teacher projects the oncoming speaker change and the expectation of the ensuing evaluation by the teacher (see also Mortensen under review). However, the lack of mutual gaze between the participants before and during the selection and nomination of the next speaker does not prevent the teacher from allocating the turn successfully to Ulla. As Ulla has been bidding for a response turn and shown her readiness to be the next speaker, she is aware of the possibility that she could be selected. Consequently, Ulla responds without delay immediately after the teacher has nominated her.

The reason why Ulla is not gazing towards the teacher is that she is paying attention to the overall task at hand – most likely to finding a specific place in the exercise in order to provide the correct answer, and to be able to read it from the book. She is thus displaying her anticipation of the next relevant action expected from the students: the response. In other words, she is projecting the

conditional relevance of the impending response by orienting her attention towards finding the answer from the book.

It seems that the teacher's gaze does not play the same role in examples 1 and 4 as in examples 2 and 3 as there is no mutual gaze during the selection and allocation actions. In example 4, the address term is the turn-constructional unit that plays the crucial role in indicating to the selected student, and to other students, who the next speaker is going to be. Although the teacher is gazing towards Ulla, she is not reciprocating: she is thus relying on the teacher's verbal information in inferring the next speaker. That the teacher directs her gaze towards the class, and towards Ulla, in her turn-allocation in lines 3 and 4 is, however, crucial insofar as she can get an understanding of who is bidding for a turn, and consequently, of being able to nominate an available and willing participant. Without the teacher's gaze being directed towards the different sides of the class the teacher cannot see who is bidding for a turn and thus cannot allocate turns to available next speakers. In this particular example, the teacher is not able to see Ulla's raised hand until she has shifted her gaze towards the right side of the class during the silence in line 3. But when the teacher has shifted her gaze and has noticed that Ulla is bidding, she is immediately able to assign the turn to Ulla.

Examples 4 and 1 thus demonstrate clearly that while the teacher's gaze is a necessary prerequisite for next speaker allocation at some point during the turn-allocation procedure, during the selection or allocation actions, the students' gaze is not (cf. Sahlström 1999: 95). Conversely, while the teachers' gaze is a prerequisite during the selection of next speakers, Niemelä (2008: 171) has shown that in extended sequences, where the already-selected speaker continues the dialogue with the teacher, the teacher's gaze towards the incipient next speaker is not necessary. In such cases, teachers can look at the teaching materials without using gaze to indicate the next speaker. Both the study by Niemelä (2008) and the present study display how in classroom interaction, and particularly in cases when the participants' focal attention is on the material object(s) through which their interaction is mediated, the participants' mutual gaze seems not to be a necessity. This is particularly the case when the next speaker is specified through the use of the address term, as there is no doubt about that speaker's identity. In such interactional sequences, the participants' attention can legitimately be targeted at the materials used during the activity. Despite the lack of mutual gaze, the speaker change can be accomplished to good effect. This is manifested in the way next speakers take the next turn without further delay after the teacher turn-allocation.

That students are permitted to direct and hold their gaze towards their books can be explained by the fact that, in some activities, the essential information for being able to provide correct answers can be found in books. The students are therefore occupied with another concurrent activity: that of finding the exact place in the book where the correct answer is located. In story-telling situations, it has been shown that, if there are several activities that occupy their attention, the recipients of the story are not, while they listen to the story, obliged to display their continued participation and hearership by

constantly gazing towards the speaker (Goodwin 1984). It appears that in pedagogical interaction when there are 'parallel activities' (Koole 2007) that students need to perform or attend to, it is legitimate for them not to raise their gaze from their books, even when they might simultaneously be bidding for a response turn. This is especially the case where the students' participation is related to the 'central activity' of the moment, the content-related teacher-led activity, and not on non-content-related other activities that might occur in classroom interaction (Koole 2007).

To recapitulate this section briefly, the realization and the success of teacher turn-allocations is always dependent on the actions and visible orientation of both parties to the extent that those turn-allocations that are constructed through the use of the verbal address term and a gaze directed towards the selected next speaker are successful each time, even if there is no mutual gaze established between the participants. But to be successful, teachers need to direct their gaze towards the class prior to the turn-allocations in order to find an available and willing participant. Teacher's gaze towards the class, at least before the allocation per se, is a prerequisite for the felicitous management of turn-taking in the classroom. But success also requires that the selected next speaker has been bidding for a turn through a raised hand or has been displaying readiness to respond in other ways. Such turn-allocation sequences demonstrate how both participants need to have an understanding of what is the established level of participation amongst the students, and who is oriented to and manifesting active participation in the emerging interaction. Later in this chapter, I will demonstrate how the establishment of mutual gaze is crucial for such embodied turn-allocation constructs as head nods and pointing gestures to be successful speaker change devices and how unsuccessful embodied turn-allocations occasion repair work from the teacher. Repair work emanates as a contingent interactional device when no verbal address terms are used in teacher turn-allocations.

5.2.2 Gaze shift projecting the relevant next action in verbal turn-allocations

In some turn-allocation sequences in the data teachers do not gaze towards the selected next speaker when delivering the turn-allocation verbally. What happens is that teachers shift their gaze towards the different teaching materials – e.g. books, papers or transparencies on the overhead projector – that are used in the ongoing activity and that function as mediators in the interaction.[34] Such turn-allocations occur in 29 out of 376 turn-allocation sequences in the data. The teacher's gaze shift towards such an object can occur already slightly before the turn-allocation itself or at some point during the turn-allocation. The onset of the gaze shift thus varies when it is viewed in relation to the verbal part of the ongoing turn-of-action. What seems to be characteristic to its commencement is that the teacher has selected the next speaker by that point, but has not

[34] Mortensen (2009) has also observed that participants orientate towards teaching materials that are used to mediate the ongoing activity.

necessarily nominated or completed the nomination of the speaker yet. In terms of student gaze behaviour, it appears that such turn-allocations are performed by the teacher both when students are gazing down at their books and when they are gazing at the teacher. There appears, therefore, to be no straightforward interactional relation between the students' gaze direction and the teachers' gaze shift during these kinds of turn-allocations.[35] This underlines the fact that the teacher gaze-shift is, first of all, performed for a particular activity-related purpose and, secondly, that the selection of the next possible speaker is accomplished before the turn-allocation and the concurrent gaze shift take place.

Most pedagogical tasks in classrooms are goal-oriented in that the activities in which the teacher and the students partake have particular pedagogical aims (e.g. Seedhouse 2004) and thus the participants' orientation during each activity is – more or less – towards the realization of those goals. For this reason, the teacher's gaze shift towards an essential pedagogical artefact during turn-allocation illustrates how the teacher projects the next-relevant interactional task: the impending evaluation of the student answer and the comparison of its correctness in relation to the possible response key provided in a book or on a transparency. The students, as was shown above, project the response action expected of them by orienting to their books either already when they bid for a turn or when they respond. Example 5 is a case in point.

(5) English_L2-3_Eeva

1		(1.3) T LOOKING DOWN AT HER BOOK
2	T	AN THE LAST (2.4) °one? (0.3) {T TURNS GAZE FROM CLASS TO TP TO SCREEN {EEVA GAZE DOWN AT HER BOOK
3		who would like to read this? (0.8) {T GAZE TOWARDS RIGHT SIDE OF CLASS {EEVA RAISES HER HAND, GAZE DOWN AT HER BOOK {HEIDI RAISES HER HAND
→		**Eeva.°** ***{T GAZE SHIFT DOWN AT TP*** {EEVA GAZE DOWN AT HER BOOK
5	Eeva	with this kind of change (0.4) {EEVA GAZE DOWN AT HER BOOK READING FROM IT
6		Victorians were nevertheless obsessed with morality, (0.5)
7		cling on their moral codes more an more (°strictly.°) {EEVA GAZE SHIFT TOWARDS T
8	T	°h↓m↑m (0.5) an we (0.3) would use <u>ing</u> form ↑here {T GAZE DOWN AT TP {EEVA GAZE SHIFT DOWN AT HER BOOK
9		so cl<u>in</u>ging (0.7) to their moral codes more an more strictly.°

[35] This is a tentative observation made on the basis of the current data collection. It is noteworthy that in quite a few of such turn-allocation sequences students are not visible to the camera. Consequently, it is difficult to make grounded claims; thus further analysis of the current data and more data is needed.

The example demonstrates how the teacher shifts her gaze down towards the transparency already during the turn-allocation, and how doing this indicates the teacher's orientation to the forthcoming evaluation. The example also demonstrates how the teacher selects and allocates the response turn to the student. When the teacher's TCU in line 3 comes to completion and the TRP takes place in the form of a short silence, the teacher selects Eeva as the incipient next speaker. That the selection is made at this point is reinforced by the fact that the teacher has directed her gaze towards where Eeva is sitting. When the teacher allocates the turn to Eeva (line 4), she directs her gaze down towards the transparency while simultaneously uttering Eeva's name. The teacher thus frames two interactional tasks at the same time. First, she allocates the response turn to the student verbally and, second, she orients towards the next relevant action that she is expected to perform – the evaluation – through her gaze shift. That the teacher keeps her gaze down during the rest of the sequence further stresses the dual nature of the teacher's turn-of-action. In fact, the main function of the gaze shift during such teacher turn-allocations seems to be related to the teacher's action of ensuring that students provide correct answers. Teachers parse the students' responses as they produce them and simultaneously teachers orient to their content, thus preparing themselves to perform the evaluation after the response. The gaze shift thereby projects the teacher's next relevant action: that of providing an evaluation of the student answer in comparison to the pedagogical task at hand.

Example 5 also shows that students do not have to direct their gaze towards the teacher during the selection and allocation process. In other words, it shows how the teacher allocates a turn to a non-gazing but bidding student and how this student orients towards her book in order to find and provide the correct response. The student is thus engaged in overlapping actions that she performs through the different semiotic resources open to her: bidding for a turn through a raised-hand, and orientation to the book through gaze in order to find the correct answer (cf. Goodwin 1984). From the video it can be seen that Eeva is not or has not been gazing towards the teacher at all, but rather gazes down towards her book throughout the better part of the sequence. She does not raise her gaze until towards the end of her response in line 7.

With regards to projection-in-interaction and the projection space introduced by Schegloff (1984: 267), the teacher's gaze shift signals that the forthcoming evaluation will come into play at the exact point when the teacher delivers the turn-allocation. Sequentially, the evaluative action is thus 'activated' during the second-pair part of the insertion sequence even before the second-pair part of the base adjacency pair – the response – is performed. The *embodied 'action projection*' (cf. Schegloff 1980) that the gaze-shift accomplishes takes place early on within the IRE sequence. It could be argued that the sequential location of the turn-allocation is the first sequential position for such an embodied projection to take place, since the evaluation of a response becomes relevant as of the moment when the response turn is being given to the next speaker.

The specific character of the teacher gaze shift differs from the other types of embodied action projections discussed in previous studies. Previously it has been shown that embodied projections, whether gaze- or gesture-based, are accomplished by recipients to display their forthcoming treatment of the speaker's current actions (Heath 1992; Haddington 2006), or by current speakers to signal turn-completion and speaker transfer (Streeck 2005, 2009) and to foreshadow pending word searches (Carroll 2006). In all of these situations the embodied projection sets particular expectations for the co-participants and their co-occurring or immediate next actions, whereas in the present case, it is the current speaker's, the teacher's, next action that is foreshadowed. By shifting gaze down during the turn-allocation, the teacher makes herself available as a recipient for the student's forthcoming response turn, thereby being able to evaluate it as it is produced. Accordingly, the gaze shift does not seem to have interactional import per se for the students' next action, the responding: instead it is the verbal part of the turn-allocation that accomplishes the speaker change and the shift in the participation framework.

The characteristic environment for teacher gaze-shift turn-allocations seems to be the different IRE-based teacher-led exercise checking or related activities involving a particular reliance on the use of books and other teaching materials and instruments. That is, when teachers need to compare students' answers to those found in the books or the transparencies they achieve this by directing their gaze at the materials. Such activities may also involve either longish response turns from the students or the writing of correct answers by the teacher on the transparency. After the response turn has been allocated to a student, the sequence unfolds so that as the student response is produced, the teacher follows its progression and prepares to deliver an evaluation of it. In a way, the teacher already at that point orients towards the response and its correctness, while the evaluation itself is actualized after the response. The sequential location of the gaze-shift and the next action it foregrounds thus reflect the teacher's institutional role of providing learning opportunities to students. That the evaluation is carried out simultaneously as the response is produced will be further discussed in chapter 6 in relation to repair.

In addition, the teacher's orientation towards an object through gaze-shift indicates that the turn-allocation is treated as unproblematic to the extent that the selected next speaker is expected to provide the response and that the speaker transfer is to be accomplished successfully. In most cases this is what happens in my data: the nominated student provides the response. However, the picture that emerges from the close study of sequences where teacher gaze-shift takes place during the turn-allocation is not as straightforward. It turns out that teachers in such turn-allocations select and nominate both students who are bidding for a turn and students who are not bidding. Interestingly, the majority of the nominated speakers provide a response despite the fact that some of them have not displayed their readiness to take the floor, i.e. they have their gaze directed towards their books and they are not bidding.

Examples of different types of teacher gaze-shift turn-allocations will exemplify what is meant by all this. First, sequences where the participants do

not establish mutual gaze are provided as they seem to be the most common type. This is followed by an analysis of turn-allocations where the participants seem to establish mutual gaze before the turn-allocation takes place. In relation to the phenomenon of non-gazing, the examples provided below will demonstrate how the realization of the allocation through teacher gaze-shift treats the allocation as unproblematic whether or not students are bidding.

Allocating turns to bidding but non-gazing students

In the majority of teacher gaze-shift turn-allocations, the teacher and the selected next speaker do not establish mutual gaze.[36] This was the case in example 5 above, and example 6 is another case in point. In it, the class is checking an exercise on adjectives, and the teacher allocates a turn to a student who has not been looking towards her at all. The teacher is sitting behind her table and her book is on the table in front of her. Only Mikko bids for a turn.

(6) English_L1_Mikko

1	T	>ja viimenen miten menis< and the last one how is it formed {T GAZE DOWN AT HER BOOK
2		(5.5) T FIRST LOOKING DOWN AT HER BOOK THEN LOOKS UP, THEN BACK DOWN STUDENTS MOSTLY LOOKING DOWN AT THEIR BOOKS MIKKO GAZE DOWN AT HIS BOOK
3	T	>tätä voi koittaa kotona (jos sattuu muistaa)< you can try this at home if you happen to remember {T GAZE DOWN {T GAZE SHIFT TO CLASS
4		(2.0) T LOOKING FIRST AT CLASS, THEN DOWN AT HER BOOK MIKKO GAZE AT HIS BOOK STUDENTS MOSTLY LOOKING DOWN AT THEIR BOOKS
5	T	eihän näitä yleensä näin monta voi olla lauseessa että (0.4) usually there can't be this many of them in a sentence so (0.4) {T GAZE DOWN {T GAZE SHIFT TO CLASS {MIKKO HAND RAISE, GAZE AT BOOK
→		**Mikko** **{T GAZE TOWARDS MIKKO** ***{T GAZE SHIFT DOWN TO HER BOOK*** {MIKKO GAZE DOWN AT HIS BOOK
7	Mikko	uhh <large (.) valuable> American stamp collection.= {MIKKO GAZE DOWN AT HIS BOOK {T GAZE DOWN
8	T	=joo. (.) se meni iha. se menee sen säännön mukaan näi. yes. (.) it went like. according to the rule it goes like this {T NODS {MIKKO GAZE DOWN AT HIS BOOK

In line 1, the teacher initiates a new sequence by inviting students to bid for a response turn. However, as we can see from the silence in line 2, nobody bids and the teacher issues a prompt in line 3. In line 4, the teacher waits again for

[36] This observation is based on the number of sequences where both the teacher and the incipient next speaker are visible in the video. There are about a handful of cases where the selected student is not visible to the student camera.

bids, but as there are none she shifts her gaze towards at her book. In line 5, she issues another prompt first looking down at her book and then shifting her gaze up towards the class. It is slightly after the teacher has lifted her gaze, when Mikko raises his hand. Shortly after, the teacher nominates Mikko as the next speaker (line 6). While she produces the verbal turn-allocation, the teacher shifts her gaze down towards her book. Through the gaze shift she not only orients to following the answer Mikko provides, but also orients to being the primary recipient of the turn. Throughout the sequence Mikko has been looking down at his book and continues to do so when he responds. As such, there is no mutual gaze between the focal participants at any point during the turn-allocation process. Nevertheless, the turn-allocation is successful since Mikko responds. Moreover, the response follows the turn-allocation immediately, as does the teacher's evaluation after the response.

As the students bid for turns most of the time, there is no competition as such to take the floor, rather the students seem to conform to the turn-taking organization and the turn-allocation constructs the teacher implements. Having said that, it is worth pointing out that both participants still play a role in how speaker change is implemented (see e.g. Mortensen under review). As Sahlström (1999: 100–107) has shown, by not raising their hands after the teacher's primary initiation students influence the unfolding interaction in that the teacher is required to issue further prompts in order to get students to bid. In the above example, the teacher produces two further prompts (lines 3 and 5) before the first student bids. He is nominated even though he is the first to bid (cf. Sahlström 1999: 102). Sahlström (1999: 103) has argued that first bidders get nominated when there are no other student bids in prior turn TRPs in the teacher's turn, which is the case here. In this excerpt, when the teacher notices that Mikko's raises his hand in line 5 during her second prompt, she selects him as the next speaker and allocates the turn to him in the next possible TRP. By directing her gaze down towards her book during the turn-allocation, she not only displays her orientation towards the forthcoming evaluation, but also an orientation towards the smooth and quick progression of the activity at hand. The turn-allocation despite the teacher's gaze-shift is treated as unproblematic: the verbal address term is treated as sufficient in accomplishing the speaker change.

In comparison to the previous examples, example 7 illustrates an occasion where it seems that the teacher and the student have an opportunity to engage in mutual gaze, which could be seen to play a role in the teacher selecting the student as the next speaker. But the reciprocal gaze takes place during the selection phase, not during the turn-allocation itself. The example is again from an EFL lesson. The class is beginning to check an exercise the students had for homework with the help of a transparency. It is during the silence in line 5 that the participants most likely establish mutual gaze as the teacher is looking towards Eeva, and Eeva is momentarily looking towards the teacher before turning her gaze towards the screen.

(7) English_L2-3_Eeva

1	T	WHO WOULD LIKE TO BEGIN {T TAKING HER BOOK FROM THE TABLE LOOKING DOWN
2		NUMBER ↑ONE {T LOOKING TOWARDS CLASS TAKING STEPS TOWARDS OHP
3		(1.5) SOME STUDENTS TALK QUIETLY T TAKING STEPS TOWARDS OHP LOOKING DOWN AT HER BOOK
4	T	an please read the whole sentence. {T GAZE SHIFT TO CLASS
5		(2.9) SOME STUDENTS TALK QUIETLY
	T	T FIRST GLANCES DOWN AT HER BOOK AT 1.4 GAZE SHIFT TO CLASS → T SCANS THE CLASS FROM LEFT TO RIGHT **AT 2.3 T'S GAZE REACHES EEVA**
	Eeva	EEVA FIRST LOOKS DOWN AT HER BOOK **AT 1.3. EEVA GAZE SHIFT TOWARDS T** & THEN TO SCREEN **AT 2.4 EEVA BEGINS TO RAISE HER HAND** AT 2.7 GAZE SHIFT DOWN TOWARDS HER BOOK, HAND RAISED
→	T	**Eeva** ***{T GAZE SHIFT DOWN TOWARDS TP*** ***{T GAZE DOWN TOWARDS TP*** {EEVA GAZE DOWN
7	Eeva	Germanic tribes came from Europe (and settled in the country) {EEVA GAZE DOWN AT BOOK
8		already inhabited by another (°race°) {EEVA GAZE SHIFT TOWARDS T AND SCREEN
9	T	hm↑m (0.4) right. {T NODS, GAZE STILL DOWN AT TP {T REVEALS THE ANSWER FROM THE TP

When looking more closely at line 5, we can see that the teacher looks down at her book first and only then lifts her gaze towards the class. Her gaze is angled slightly more towards the left side and it scans the class all the way to the right in quick motion. At 2.3 seconds into the silence, the teacher's gaze reaches Eeva, who is sitting more towards the right side of the class. Eeva has at that point been gazing towards the teacher for a while and raises her hand when the teacher's gaze reaches her. It is at that moment that the teacher sees Eeva's raised hand and begins to direct her gaze towards the transparency. The teacher's gaze trajectory is quick and continuous in this extract; it does not stop at any point. Rather it sweeps the class in one motion and the selection of Eeva as the next speaker is accomplished in conjunction with it. The teacher's gaze trajectory ends with the teacher looking down at the transparency while nominating Eeva (line 6). At that point, Eeva has been looking down at her book from the end of the silence (line 5). Thus, both the teacher and Eeva orient towards their respective object domains (teacher to transparency and Eeva to book) in their unfolding actions.

The above extract is just one illustration of a sequence in which the participants establish mutual gaze. The extract also shows that the window within which this can occur before they change their gaze trajectories is rather

short. In other similarly constructed turn-allocation sequences, the window for mutual gaze is also short and takes place either during a silence that precedes the turn-allocation, as in the above example, or during a teacher prompt which is followed by the teacher gaze-shift turn-allocation. Mutual gaze therefore can take place prior to the nomination of the next speaker, but it does not seem to be an obligatory element for successful turn-allocations in sequences of this kind.

All the examples so far have demonstrated how teachers are able successfully to allocate turns to students who are bidding for a response turn, and who are not gazing towards the teacher during the turn-allocation. However, there are couple of instances in my data where teachers allocate turns to non-gazing and non-bidding students. In such instances, some of the allocated students provide responses, while others do not provide the expected response. Rather they respond by showing their lack of attention to or understanding of the ongoing task. That is, the reason for students not responding seem to pertain i) to students not having an understanding of the current task and what it is that they are required to do, ii) to students having lost their place in their books, or iii) to students not knowing the answer.

Allocating turns to non-bidding, non-gazing students

Example 8 provides an illustration of a case where a non-gazing and non-bidding student does respond when the teacher allocates the turn to him by shifting her gaze down towards the transparency during the turn-allocation. The teacher and the student do not seem to establish mutual gaze despite there being a small opportunity for it. The selected student has not raised his hand or otherwise indicated his willingness to respond, except by quickly glancing towards the teacher. The example comes from an EFL lesson in which the class is going through the comparative forms of adjectives: the teacher makes notes on a transparency and the students write in their notebooks.

(8) English_L1_Kalle

1		(1.7) T LOOKING DOWN AT HER BOOK AND THEN AT TP
2	T	ja (1.4) otetaas tosta ykkösestä sitte (.) and lets take it from number one then {KALLE GAZE DOWN AT HIS BOOK
3		mieleenpainettavia asioita things to remember {KALLE GAZE DOWN AT HIS BOOK
4		oikeinkirjoituksesta lähinnä. (.) mostly things about spelling {KALLE GAZE DOWN AT HIS BOOK
5	T	eli mite sä sanot (0.5) so how would you(sg) say **{T GAZE SHIFT TO CLASS** {KALLE GAZE DOWN AT HIS BOOK **{KALLE GLANCE UP TO T**
6		suuri suurempi (.) suu↑rin. big bigger biggest {KALLE GAZE DOWN AT HIS BOOK

7		(1.7) T GAZE TOWARDS CENTRE OF CLASS KALLE GAZE DOWN AT HIS BOOK TUOMAS GAZE TOWARDS T MIKKO GAZE SHIFT TOWARDS T
→	T	**Kalle** ***{T GAZE SHIFT DOWN TOWARDS TP*** {KALLE GAZE DOWN AT HIS BOOK
9	Kalle	<uhh (0.8) big (0.5) bigger (an) (0.4) more biggest> {KALLE GAZE DOWN AT BOOK {KALLE GAZE SHIFT TO T {T GAZE DOWN AT TP, WRITES ON IT
10	T	hm↑m {T GAZE DOWN, WRITES ON TP
11		(1.7) T WRITES ON TP

What is interesting about this sequence is that two other students are directing their gaze towards the teacher or the screen (that is behind the teacher), when she is deciding to whom to allocate the next turn in line 7. Neither of the students have raised their hands, but they are displaying their recipiency and participation in the current activity in a more straigtforward manner than Kalle, as by gazing towards the teacher and by showing that they are listening they are 'doing being recipient' (Sahlström 1999: 86–87). Nevertheless, the teacher selects Kalle, who has only glanced towards her in line 5 and who has otherwise been looking down at his book. More importantly, Kalle responds to the question and he does so immediately after the teacher has allocated the turn to him (line 9). There is however a small hesitation token ('*uhh*') in turn-initial position that illustrates that perhaps Kalle was not prepared to answer the question, even though he is able to provide an answer (as illustrated by his partially correct response in line 9). It is also worth pointing out that Kalle raises his gaze towards the teacher towards the end of his TCU (line 9). This reveals his orientation towards the emerging TRP and the impending speaker change.

Kalle's small hesitation before the actual beginning of the TCU seems to be typical of such teacher non-gaze turn-allocation sequences. It is difficult to say whether it is due to the non-bidding status of the nominated student or due to cognitive processing that providing the response instantiates when the student has not been prepared to answer. Nevertheless, a similar type of hesitation and delay in constructing the response action occurs in other turn-allocation sequences with the same features (i.e. with non-bidding, non-gazing potential next speakers). However, not all response turns are realized in the same manner as in the above example. At times, there is a recognisable silence between the teacher's turn-allocation and the student's response when a non-bidding student has been allocated a turn. Both types of response constructions indicate that the nominated student has been selected without prior indication and that to be able to respond the student is in need of time to orient to the response action.

The extract in part also provides evidence that students are at all times elligible next speaker candidates when they are not bidding, but have nevertheless gazed towards the teacher in such a fashion that the teacher sees

their gaze (cf. Mortensen under review). Namely, Kalle does glance towards the teacher in the excerpt in line 5 and the teacher is able to see this as Kalle is sitting in the centre of the class right in front of her. The teacher is thus able to see his gaze when she raises her own gaze towards the class in line 5. By selecting and nominating students who are not bidding, the teacher provides opportunities for as many students as possible to participate in the interaction. It is up to the students whether they exploit the opportunity. However, when teachers allocate turns to non-bidding students, they are ignoring the social requirement for students to show their willingness to be selected as the next speaker (Mortensen under review). Teachers thus draw on their institutional right to allocate turns to any one of the students in the class and to expect a responsive action, whether it is the expected response or an account of why the response is not provided.

In a few of the turn-allocations involving teacher gaze shift and non-bidding, non-gazing students, the nominated student does not provide the answer, rather the student states explicitly that he or she is having problems with the assigned task. This in turn leads to another turn-allocation sequence by the teacher. In example 9, the participants do not establish mutual gaze during the selection and turn-allocation process. They gaze towards one another when the nominated student has initiated a repair sequence. The task depicted in the extract is that of checking an exercise about word emphasis; the correct answers for which can be found in the students' books where the students have written them.

(9) English_L1_Ville

1	T	an then? {T GAZE DOWN AT HER BOOK
2		(1.2) T GAZE SHIFT TOWARDS THE CLASS MOST STUDENTS GAZE DOWN AT THEIR BOOKS VILLE GAZE DOWN AT HIS BOOK
→	T	**Vil↑le** ***{T GAZE SHIFT DOWN AT BOOK*** {VILLE GAZE DOWN AT HIS BOOK {LEV SMALL HAND RAISE
4		(1.3) T LOOKING DOWN AT HER BOOK VILLE GAZE DOWN AT HIS BOOK
5	T	>the following< {T GAZE SHIFT TO VILLE {VILLE GAZE DOWN AT HIS BOOK
6	Ville	mä oon aiva hukassa. (0.9) I'm completely lost {VILLE GAZE DOWN AT HIS BOOK {T GAZE TO VILLE
7		>mitä tässä niinku tehhää?< what is this about {VILLE GAZE SHIFT TO T {T GAZE TO VILLE

8	T	elikkä tässä piti laittaa näitä (0.4) sana (.) >ninku< sanapainoja so you need to mark these (0.4) word (.) >like< word emphasis {T GAZE DOWN AT HER BOOK {T GAZE TO CLASS {VILLE GAZE DOWN AT HIS BOOK
9		mitkä sanat on painotettu sielä, mitä se korosti sieläh which words are stressed there what did it emphasize there
10	Ville	ai ↓jaa (0.6) nii (joo) oh yea (06.) right (yea) {VILLE GAZE DOWN AT HIS BOOK {T GAZE SHIFT DOWN {KALLE GAZE AT BOOK
→	T	°joo-o° (0.5) **Kalle** {T GAZE SHIFT TO CENTRE OF CLASS {KALLE GAZE AT BOOK

After the teacher has allocated the next turn to Ville in line 3, a lengthy silence follows: Ville does not provide the answer. The silence is followed by a teacher prompt in line 5. The prompt is designed to get Ville to respond, but Ville states that he is lost and continues that he does not know what he is supposed to do (lines 6–7). Although the teacher next explains the goal of the task to him (lines 8 and 9), she selects another respondent (line 11): Ville's neighbour.

Earlier it was stated that in turn-allocations involving the teachers' gaze shift downwards, the turn-allocation is treated as unproblematic by both participants. Here the teacher's turn-allocation is first treated by the teacher as unproblematic as her gaze is directed towards the book already during the turn-allocation (line 3), thereby projecting the forthcoming evaluation of the response when it is performed. She thus displays her expectation that Ville is going to take the next turn. But the turn-allocation is not unproblematic insofar as the nominated student does not provide the response, but tells the teacher that he does not know what he is expected to do. The lengthy silence after the teacher's turn-allocation already implicates a possible problem (line 4), which the teacher tries to repair by issuing a prompt to the student (line 5). The teacher appears to treat the silence as a hearing problem on the part of the nominated student. But the very fact that the student uses Finnish when he speaks strongly suggests that he is completely lost. Ville is not co-operative in this sequence and the teacher needs to explain in Finnish what the task is about and to find another respondent. However, after having explained the task to the student, the teacher does not demand an answer from Ville, but glances down at her book, then shifts her gaze to the class and allocates the response turn to a third party. As the teacher does not persist in seeking a response from Ville, her actions indicate her orientation towards getting the task accomplished. It could also be argued that the teacher does not pursue an answer from Ville not only because he has explicitly said that he does not know, but also because the teacher nominated him even though he was not bidding.

Allocating turns to non-bidding, non-gazing students has sequential consequences (Mortensen under review), as the above example illustrates. The teacher is required to explain the task to the student as he does not know what he is supposed to do. She also needs to find another respondent. Both of these

actions restructure the basic IRE sequence and delay its smooth accomplishment.

In the above sections, I have focused on discussing teacher gaze-shift turn-allocations according to whether the students are gazing towards the teacher or their books and whether they bidding or not. I have also shown what kind of understandings towards the unfolding interaction the participants construct through the different turn-taking configurations. By illustrating the variety of student displays of readiness and availability as next speakers when teachers are selecting and allocating response turns, I hope to have shown that the role of teacher gaze-shift as part of the turn-allocation process has not changed: it is not in fact related to the turn-allocation in the sense that it would have interactional import for speaker transfer and thus for the student participation per se. The verbal address term is the interactional construct in these turn-allocations that accomplishes the turn-taking. The gaze-shift the teacher performs is enacted for the particular purpose of orienting to, and thereby projecting, the teacher's relevant next action, the evaluation. The onset of the gaze-shift does not seem to matter: the shift exhibits its projective action, whether it takes place before or during the turn-allocation or just as student response turns are initiated (this last point will be discussed in chapter 6).

In sum, it can be concluded that use of gaze is a prerequisite for teachers to be able to allocate a response turn to next speakers. But the site in the sequence where it is necessary for teachers to focus their gaze towards the class is when teachers select next speakers; gaze is not as essential when teachers deliver the turn-allocation itself. During the turn-allocation, it has been shown that in particular kinds of activities that are mediated by books and transparencies teachers, as well as students, are permitted to direct their gaze towards the teaching materials and keep them fastened there. However, the function of the gaze trajectories is different for the different participants. When teachers perform the gaze-shift during the turn-allocation, it is performed in anticipation of the forthcoming evaluative action they are to produce after the student response. In this way, the turns-of-action teachers achieve in such sequential locations involve two simultaneous, overlapping actions through two different semiotic resources. The verbal part of the turn construction is used to allocate the turn to the selected student. The gaze-shift is employed as an embodied projection device displaying the teacher's orientation to the successful accomplishment of the pedagogical goals constructed for different activities through the interaction. The turn-allocation thus offers the first sequential position in which the teacher evaluation of the IRE sequence is constructed to be at play. This is because the teacher gaze-shift is produced concurrently with the turn-allocation.

With respect to student gaze, when it is fixed downwards at books, it helps them find correct answers (when they are bidding for a response turn), and at the same time their raised-hands display their readiness to be selected as next speakers. In that way, they also display their co-orientation to two concurrent actions through different semiotic resources (i.e. gaze orientation

and hand-raise). And even though neither of the participants takes cognisance of each other's actions visually, both teacher gaze-shift and student gaze orientation to their books are interactionally meaningful and sequentially implicative in terms of bringing off the participants' respective impending next actions, thereby completing the evolving IRE sequence.

5.2.3 Divergent gaze orientations in invitations and commands to respond

In the above sections the analysis of the teachers' use of gaze in turn-allocations has only been described in relation to verbal address terms, i.e. to students' names. There are, however, occasions in my data where the teacher allocates turns to students by using more elaborate verbal constructions, for example, questions and statements that either include or do not include the selected speaker's name. In fact, this practice is characteristic only to one of the EFL teachers (L1) and does not appear to be used by other teachers in activities structured according to the IRE sequence. The EFL teacher allocates turns to students 15 times through these kinds of turns-of-action in the data.

A feature common to these rather elaborate turn-allocations is that they are employed in sequences where the students are not bidding for a turn, and consequently the shape of the turn-allocations reflects this, as will be shown below. Another common feature is that they also occur in particular types of activities, such as teacher-led discussions and the teaching of grammar, where the interaction is not based on book exercises per se, but it is created jointly by the teacher and the students. These activities do not have the same kind of predetermined IRE basis for the interaction. Rather the interaction is structured to include plenary segments by the teacher or extended discussion sequences between the teacher and the students. The teacher thereby explicitly invites a response from a student or says that a student is to provide the response. The teacher thus draws on her institutional role as the manager of the interaction to assign turns to any one of the students in the class (Mortensen under review). However, it seems to be up to the students whether they take the advantage of the opportunity or not. If the selected student does not provide the expected answer the teacher accepts this by finding another potential next speaker. In about half of these kinds of turn-allocations the selected student takes the opportunity and responds, and in half the selected student does not provide the response, which leads to an additional selection and turn-allocation sequence.

In those turn-allocations where the selected student's name is used, it occurs in three different turn-constructional places: in turn-initial position, in intra-turn position and in turn-final position. All three positions build different types of participation frameworks within the ongoing interaction and expectations for the interactional participants (McHoul 1978). When teachers use explicit address terms in turn-initial position in their question design, the nominated student becomes the primary recipient of the teacher's turn, while other students are no longer necessarily obliged to orient to the emerging exchange and its content. Such turn-allocations also signal that the next speaker is expected to take the turn at the next possible TRP. In contrast, address terms

placed in turn-final position in teacher initiations reverse the situation in that all students are required to orient to the teacher's turn and to treat it as possibly being addressed to any one of them (McHoul 1978: 207). The teacher is thus withholding the next speaker selection until the end of the current turn-of-action, and is consequently calling for the attention and participation of all students until the next speaker nomination is delivered. In classroom interaction, the turn-constructional position of the address term is crucial in guiding the students' attention to the unfolding interaction and what is expected from them in terms of turn-taking and participation.

In similar manner as in the gaze-shift examples above, in these turn-allocations the teacher appears to select the possible next speaker before the turn-allocation takes place. During the turn-allocation, the teacher's gaze is either directed towards the selected student or towards the teaching materials. Students can be gazing either at their books, their neighbours or at the teacher during the turn-allocation. Thus, mutual gaze between the teacher and the incipient next speaker is not necessarily established. However, reciprocal gaze between the teacher and a student may occur before the turn-allocation is delivered, which seems to lead (in some cases) to the selection of the gazed-at student as the next speaker (cf. Mortensen under review). In the following, I will first provide examples where the teacher and a student seem to reciprocate gaze before the turn-allocation and where the teacher also gazes towards the selected next speaker during the turn-allocation. This is followed by examples where there is no mutual gaze prior to the turn-allocation and the teacher's gaze shifts down towards the teaching materials during the turn-allocation.

Turn-allocations and the establishment of mutual gaze

Example 10 illustrates how the teacher and a student gaze towards one another briefly during a silence in line 3 and how the response turn is allocated to the student in line 4. The class is going through the comparative forms of adjectives and at this point the teacher is seeking an explicit answer from the class to how one writes the comparative form of 'nice'. Nobody is bidding for a turn, and consequently, the teacher assigns a turn to a non-bidding student.

(10) English_L1_Ville

1	T	no mikäs jos täälä loppuu tähän eehen,=
		well what if this here ends to this e
		{T GAZE DOWN AT TP
		{VILLE WRITES INTO HIS NOTEBOOK, GAZE DOWN
2		=nii mitäs tuolle tapahtuu.
		then what happens to that
		{T GAZE SHIFT TO CLASS
		{VILLE GAZE SHIFT TO CLASS TOWARDS SCREEN
3		(2.9) T LOOKING AT CENTRE OF CLASS
		AT 1.6 T GLANCES DOWN AT TP
		TUOMAS, MIKKO & LINDA GAZE TOWARDS T
		OTHER STUDENTS GAZE DOWN
		VILLE GAZE TOWARDS T
		AT 1.1 VILLE GAZE DOWN AT BOOK

→	T	**>pistänkö mää kaks eetä peräkkäin Ville?<**
		do I put two e's one after the other Ville
		{T GAZE TOWARDS VILLE *{T GAZE SHIFT DOWN TOWARDS TP*
		{TUOMAS GAZE SHIFT DOWN AT BOOK
		{LINDA GAZE SHIFT DOWN AT BOOK
		{VILLE GAZE DOWN AT BOOK
5	Ville	↓ei
		no
		{VILLE GAZE SHIFT TOWARDS T
		{T GAZE DOWN TO TP, BEGINS TO WRITE ON IT
6	T	<e:n [laita, nicer the nicest. (0.8) ja näin tässä (0.5) homma etenee>
		no I don't nicer the nicest (0.8) and this is (0.5) how things proceed
		{T GAZE TO TP, WRITES ON IT
7	Ville	[(pelkkä ärrä)
		only an r
		{VILLE GAZE TO T

In lines 1–2, when uttering the initiation the teacher is looking down towards the transparency where she has written the word 'nice'. Towards the end of the multi-TCU she shifts her gaze to the class (line 2) and during the silence (line 3) she first gazes towards the centre of the class, before she quickly glances down at the transparency. During the teacher's initiation, Ville has been writing in his notebook, and thus his gaze has been directed down towards the book. When he finishes writing, he shifts his gaze first towards the screen (line 2) and then towards the teacher (line 3). It is during the silence that both the teacher and Ville direct their gaze towards one another, when the teacher is looking towards the centre of the class, where Ville is sitting. However, it is impossible to say whether they establish mutual gaze. What can be said is that they are likely to notice each other's gaze trajectories and develop an understanding of each other's gaze actions. It is worth mentioning at this point that there are other students who gaze towards the teacher almost throughout the extract, even during the silence. The teacher, nevertheless, selects Ville, who has only glanced towards her, as the next speaker.

The turn-allocation takes the form of a yes/no question, which requires a precise reply from Ville. The form of the question, however, seems not to leave Ville the choice not to respond: he is ordered to respond. On the other hand, the content of the question is not cognitively demanding as it requires knowledge of proper spelling in English. For this reason, it can be argued that the teacher's command is not face-threatening to Ville, even though he has not been bidding for a turn. It appears that the teacher assumes that Ville knows the answer, and therefore, treats her command to respond as unproblematic. As Ville replies correctly without hesitation and without delay, it can be stated that the teacher's turn-allocation was unproblematic.

The turn-allocation is interesting in the sense that the teacher first issues the question while the name of the selected next speaker is uttered in turn-final position. As the next speaker is specifically identified there, the first part of the turn-allocation (i.e. the question) makes it possible that any one of the students can be named as the next speaker at that point (McHoul 1978). That is, all the

students are possible next speakers until the teacher identifies Ville as the next respondent. From the extract it can be seen that the teacher directs her gaze towards Ville or to that part of the class where he is sitting, when she begins the question. She has thus selected him already at that point as the incipient next speaker, and this becomes evident from the fact that the student's name is smoothly added to the end of the turn. There are no pauses or other elements that would mark that the teacher made the selection after producing the initiation (cf. Lerner 2003). Also directly in the teacher's gaze trajectory are Tuomas and Linda who have been gazing towards the teacher during the beginning of the sequence. As the teacher begins her turn, both students shift their gaze down towards their books – Tuomas first, then Linda. Their sudden gaze shifts appear to be coordinated with the teacher's gaze direction and the fact that they are liable to be selected as next speakers: they avert their gaze away from the teacher in order not to be selected (see also Mortensen under review).

Below is another example, where a student who has been looking towards the teacher for quite some time is selected as the next speaker and where the teacher and the student have an opportunity to establish mutual gaze before the turn-allocation. The sequence is again from the same task as the previous one, and here the teacher has been asking for the students to provide a rule for why the words 'less' and 'fewer' go together with different types of nouns. Prior to the extract presented here, a student has answered that he does not know why, and in the extract, the teacher is looking for other respondents. In line 1, she inquires whether a group of three girls who are sitting at the back of the class remember the reason. One of the girls shakes her head in response while the two others keep looking down towards their books (one of them is writing in her notebook).

(11) English_L1_Tuomas

→	T	muistaako tytöt?
		do you(pl) girls remember
		{T GAZE TOWARDS THE GIRLS AT THE BACK
2		(3.0) T LOOKING TOWARDS THE GIRLS AT THE BACK
		LINDA SHAKES HEAD LOOKING DOWN
		RIINA WRITES IN HER NOTEBOOK
		KERTTU GAZE DOWN
3	T	kellään mitään mielikuvaa tästä. .hh
		anyone have any idea about this .hh
		{T LOOKING TOWARDS THE GIRLS AT THE BACK
		{TUOMAS GAZE TOWARDS T
4		miks mulla on less mo↑ney (1.7) mutta fewer friends.
		why do I have less money (1.7) but fewer friends
		{T GAZE SHIFT TOWARDS TP
		{TUOMAS GAZE TOWARDS T{TUOMAS SHIFTS POSITION
		FROM LEANING TO HIS DESK
		TO UPRIGHT SITTING POSITION

5		puhekielihän tietysti voi sanoo miten vaan. in spoken language of course you can say it the way you want {T GAZE SHIFT TO CLASS {TUOMAS GAZE TOWARDS T
6		(2.5) **TUOMAS,** MIKKO & LINDA **GAZE TOWARDS T** OTHER STUDENTS GAZE DOWN AT THEIR BOOKS T GAZE TOWARDS CENTRE OF CLASS
→	T	**Tuomaksella mitää mielikuvaa (.) °mistä° tää °johtus°** Tuomas have any idea (.) why it is like this **{T GAZE TOWARDS CENTRE OF CLASS** {TUOMAS GAZE TOWARDS T
8	Tuomas	onks toi less tulee sillo ku ei voi ↓laskee. is it that less is used when you can't count {TUOMAS GAZE TOWARDS T {T GAZE TOWARDS TUOMAS
9	T	joo. elikkä aine ja abstrakti sa↑nat yes. in other words substance and abstract words {T GAZE SHIFT TO TP
10		I have less food, less money (.) ainesanat (1.0) ja (0.6) substance words (1.0) and (0.6)
11		↓friends on countable sana, eli tässä su- se mm- substantiivi saa monikon. friends is a countable word and here no- it mm- the noun is in plural

When the teacher does not get any candidate answers from the girls, she issues a prompt in lines 3–5. Towards the end of the multi-TCU (line 5), the teacher shifts her gaze towards the class. When she does this, she is faced with three students who are gazing towards her, one of whom is Tuomas (line 6). Tuomas has been gazing towards the teacher already from the beginning of the sequence. At this point, the teacher appears to select Tuomas as the next speaker and the turn-allocation ensues. The teacher and the selected student gaze towards one another during the silence (line 6) as well as during the turn-allocation (line 7). In what follows, Tuomas produces the answer immediately without hesitation. However, the answer is constructed as a candidate explanation in the form of a yes/no question, which turns out to be the sought-for reply.

The turn-allocation itself is constructed so that the student's name is in turn-initial position. The address term is followed by a question (line 7). That the verbal address term is in turn-initial position explicitly not only tells the other students who the teacher's turn is primarily addressed to and who the next speaker is, but it also attracts Tuomas's attention and sets an expectation for him that he is to take the turn at the next possible TRP. (That is, he has time to adjust to the fact that he is to take the next turn.) More importantly, the name of the addressed student is inflected to fit the question design, and the question itself invites Tuomas's reflection on the issue at hand. The question is designed so that it gives Tuomas the option of not taking the floor and providing the response: he could say that he does not have any idea. It is good to remember, first of all, that the teacher has already tried to get an answer from several

students to this particular question, but having had no success, she formulates her question so as to give Tuomas the option of declining to reply. (In terms of the question content, this one is more demanding than the previous one in example 10), which might be one of the reasons why the teacher formulates the question as seeking students' opinion.) This is supported by the fact that the teacher utters part of the question with lower volume than the surrounding utterance, while nevertheless gazing at Tuomas throughout the turn-allocation. In comparison with example 10, the teacher's turn is here less face-threatening and does not have such imperative force. However, these features indicate that the teacher treats the turn-allocation as somewhat problematic insofar as she does not necessarily expect a proper answer from Tuomas (as no one else has provided one either). This is especially on account of Tuomas's non-bidding status: he has not bid for a turn in any way although he has been actively gazing towards the teacher, and thus has most likely been listening to the teacher. His gaze orientation portrays his recipiency and co-participation in the ongoing interaction, but also signals that he is available for being selected as the next speaker (see also Mortensen, under review; Sahlström 1999). This is further enhanced by the change in his body position in line 4: the shift from leaning to his desk to an upright sitting position makes him more available as an incipient next speaker (cf. Mortensen 2009).[37]

In examples 10 and 11 the teacher and the student who has been nominated as the next speaker have had a possibility to establish mutual gaze during the selection and turn-allocation sequence. The establishment of reciprocal gaze has seemingly influenced the interaction so that the teacher has selected the gazed-at student as the next respondent. On both occasions, the selected students have not been bidding, but have shown their recipiency and participation through their embodied behaviour. When calling upon the students' attention and speakership, the teacher has designed her summons in order to fit both the non-bidding status of the students and the possible face-threat created by the turn-allocation as well as the nature of the question and its content. In other words, the teacher's actions are contingently built on the prior interaction, i.e. the other students' unwillingness to respond, as well as the students' displays of different forms of recipiency. That the teacher shapes her turn-allocations according to the exigencies of the interaction reveals 'interactional sensitivity' (Schegloff 1981: 73) on her part. It also displays the interactional work she undergoes to negotiate intersubjectivity and to maintain social solidarity. What happens when the teacher and the incipient next speaker do not establish mutual gaze? Are the teacher's turn-allocations designed any differently?

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37 It is actually hard to say whether the teacher selects Tuomas on her own account as the next speaker or whether the fact that Tuomas positions himself into a more available participation position influences the teacher's choice.

Turn-allocations without the establishment of mutual gaze

Example 12 demonstrates how the teacher allocates a turn to a student so that the participants do not establish mutual gaze. The example comes from a teacher-led discussion where the students are to describe in a couple of adjectives people in different professions. Thus, the students can provide either short, two to three word answers or form longer sentences stating their opinion. The students choose the descriptive adjectives from a list that has been provided for them in their books.

(12) English_L1_Mikko

1	T	okay a politician? (0.9) {T GAZE DOWN AT HER BOOK {T GAZE SHIFT TO CLASS {MIKKO GAZE DOWN
2		needs a lot of qualities (.) doesn't he {T GAZE TOWARDS RIGHT SIDE OF CLASS LEANING ON THE DESK {MIKKO GAZE DOWN
3		(1.7) T LOOKING AT RIGHT SIDE OF CLASS, LEANING ON THE DESK AT THE END, QUICK GLANCE DOWN AT HER BOOK ***MIKKO GAZE DOWN AT HIS BOOK*** (LEANS ON RH)
→	T	**Mik↑ko whaddo you suggest?** **{T GAZE SHIFT TOWARDS MIKKO** {MIKKO GAZE DOWN AT HIS BOOK
5	Mikko	hmm, I think that precise is (1.0) {MIKKO GAZE DOWN AT HIS BOOK {T GAZE DOWN AT HER BOOK
6		hmm (1.5) [precise] and (1.0) responsible. {T GAZE SHIFT TOWARDS MIKKO
7	Jari	[yes]
8	T	o↑kay=but do you think politicians <u>are</u> precise. {T GAZE SHIFT DOWN {T GAZE SHIFT TOWARDS CLASS {MIKKO GAZE SHIFT TOWARDS T

In line 2 the teacher shifts gaze towards the right side of the class while issuing the initiation. During the silence in line 3, she continues to gaze towards the right and it appears that she gazes directly towards Mikko as if selecting him. However, she does not immediately allocate the turn, but glances down at her book and when raising her gaze, begins the turn-allocation (line 4). The turn is again constructed so that there is a verbal address term in turn-initial position followed by a question. As in the previous example, here the address term in turn-initial position draws Mikko's attention and sets expectations for him to take the turn at the next possible TRP. With the question the teacher invites Mikko to tell the class his opinion about what politicians should be like. As she allocates the turn to Mikko, the teacher keeps gazing towards him. The gaze alongside with the address term signal to the other students the addressed recipient, and hence the next speaker. Mikko, in contrast, does not raise his gaze towards the teacher at any point. Despite his non-gazing status, Mikko

responds in lines 5–6. He only raises his gaze when the teacher asks the class a follow-up question (line 8), and thus extends the IRE sequence.

In the same manner as in examples 10 and 11, in example 12, the teacher designs the allocation to fit the ongoing interaction so that it leaves space for the addressed student to not take the floor. The allocation is not face-threatening in that sense. Nevertheless, the student does take the opportunity and replies. As already shown earlier, students have a legitimate right not to establish mutual gaze with the teacher when they are being allocated turns. Rather they are allowed to fix their gaze at their books, from where they can find answers to the teacher's questions. In fact, the students do not have to raise their gaze towards the teacher at all. This is a striking contrast to everyday conversation, in which the participants more or less establish mutual gaze at some point during the current speaker's turn (Goodwin 1981) or towards the end of a turn-constructional unit at the TRP where speaker transfer is projected (e.g. Streeck 1995; Lerner 1993, 2003). A reciprocal gaze can be said to be a prerequisite for smooth turn-taking to take place in ordinary conversations. However, it is very seldom that the students decline to provide an answer when the teacher invites responses from them, including when they are not bidding for a turn nor gazing towards the teacher. This demonstrates, first of all, that students comply with the institutional turn-taking organization manifested in these activities. Second, students employ most of the opportunities offered for them to participate in classroom interaction – if they are able to provide the expected answer. It also illustrates that even though the teacher has the right to manage the interaction both participants affect how interaction is constructed.

So far I have demonstrated how the students' gaze can be directed at their books when they are being allocated turns. These turn-allocations have included the teachers' gaze towards the students during the turn-of-action. But in similar fashion to plain verbal address and gaze-shift turn-allocations, when teachers invite responses from non-bidding students, their gaze trajectory can vary. It is not always fastened on the selected next speaker throughout the turn-allocation. On occasion, the teacher's gaze is directed towards books or transparencies in similar ways as the students' gaze. It appears that the ongoing activity and how it is organized and realized influences the direction of the teacher's gaze.

Below I will provide an example of a slightly different type of teacher gaze trajectory during the turn-allocation. This is done in order to illustrate what aspects teachers orient to when allocating turns to students and how these orientations influence the design of the turn-allocation. Example 13 is an instance of a teacher allocating a turn to a non-bidding and non-gazing student, who nevertheless provides the sought-for response. In the activity, the teacher writes the students' answers on a transparency from which they copy the forms into their notebooks.

(13) English_L1_Ville

1	T	mites sanottas <vammaiset?> how would one say the handicapped {T GAZE DOWN AT TP {T GAZE SHIFT TO CLASS {VILLE GAZE TOWARDS FRONT {VILLE GAZE SHIFT DOWN
2	(Jarmo)	((coughing))
3	Jari	<(vähä) (0.2) taas> bit (0.2) again
4	T	vammai[set?] the handicapped {T GAZE AT CLASS, RIGHT SIDE
5	Jari	[vähä] meinaa lipsua taas °(x)° it's getting a bit inappropriate again
6		(1.1) T LOOKING DIRECTLY TOWARDS THE BOYS AT THE RIGHT VILLE GAZE DOWN AT HIS BOOK, WRITING
→	T	**Ville, miten sanosit.** Ville how would you(sg) say ***{T GAZE DOWN AT TP*** ***{T GAZE SHIFT TOWARDS VILLE*** {VILLE GAZE DOWN AT HIS BOOK, WRITING
8	(Jarmo)	((coughs))
9	Ville	uhh the *handicapped* {VILLE GAZE DOWN {VILLE GAZE TOWARDS T {T GAZE AT VILLE {T GAZE SHIFT DOWN AT TP
10	T	esimerkiksi. (0.7) <the handicapped> for example {T WRITES ON THE TP

The example reveals that the teacher clearly selects the next-respondent during the silence in line 6 when the teacher is looking at a group of boys. The turn-allocation that ensues is verbally designed so that again the student's name is in turn-initial position followed by a question *miten sanosit* (Eng. how would you say). The turn-allocation explicates Ville as the next speaker and at the same time excludes the other students from being potential next speakers. The question format invites Ville's opinion about how the English plural noun is produced from the Finnish word *vammaiset* (Eng. the handicapped). From an embodied perspective, the teacher's turn in line 7 begins by the teacher directing her gaze down towards the transparency. At the same time she also moves her hand slightly on top of the transparency into a position from where she is able to write easily. After the teacher has done this, she shifts her gaze towards the right side of the class, where Ville is sitting. The teacher's gaze shift down and the accompanying hand movement indicate that the teacher is preparing to write the answer on the transparency once she receives the correct reply. The teacher's gaze shift up and towards Ville not only marks the TRP for speaker change, but also her readiness to receive Ville's response.

Although the teacher directs her gaze towards the class, and towards Ville, already during the initiation in line 1, she and Ville do not establish mutual

gaze during the sequence. Ville gazes towards the teacher only at the beginning of the sequence when the teacher is looking elsewhere (line 1). Thereafter, Ville shifts his gaze down to his book and writes in it. Therefore, he does not see the teacher's gaze trajectory during the turn-allocation (line 7) and how the teacher makes herself available through the gaze shift towards him. Ville raises his gaze towards the teacher at the end of the TCU in line 9. By that time, the teacher is orienting towards the transparency and writing the correct answer on it. Ville produces the answer after slight hesitation ('uhh' discourse marker in line 9), thus partially displaying that he was not expecting to answer the question.

The fact that the teacher assigns the response turn to a non-bidding student and that the teacher orients through her hand movement on the transparency to the correctness of the forthcoming answer imply that she treats the turn-allocation as unproblematic. This seems to be the case since Ville provides the response accordingly. Again the question content and the way the question is structured to seek Ville's opinion about the issue at hand render the turn-allocation less face-threatening. Nevertheless, the teacher keeps gazing towards Ville until he has begun to respond (line 9). The teacher's continued gaze illustrates that she is making sure that Ville provides the response, before she shifts gaze down at the transparency in order to write the answer on it. That is, the teacher first makes sure that the response is forthcoming before she orients to writing it. Notice how the teacher's holding of her gaze at Ville until he begins his turn differs from the turn-allocation gaze-shifts where the students were bidding. Here the teacher explicitly orients to bringing off the speaker change before focusing back on the forthcoming response and writing it down on the transparency. But before the turn-allocation has come to completion, she has made sure that she is able to write the answer in the proper place on the transparency.

The above examples have shown that one of the EFL teachers employs different types of invitations and commands to respond in soliciting students' participation when they are not bidding for response turns. The teacher's gaze orientation during these turn-allocations varies: she either gazes towards the students or towards the teaching materials. As such, the teacher and the addressed student do not necessarily achieve mutual gaze, but they might. The success of the turn-allocation, and the speaker change that follows, is therefore not dependent on whether they establish mutual gaze, but on other interactional phenomena. It appears that it is dependent on the kinds of responses the teacher elicits and whether students know the answers or not.

Along with the other examples in the gaze analysis, the present examples have illustrated how the teacher's gaze trajectory is contingent on the relationship between the type of a turn-allocation and what kind of a response is expected from the selected student. It is also contingent on the type of a follow-up activity the teacher is to perform in evaluating the answer, i.e. is she to write the answer on a transparency or check it in a book. For instance, in sequences where the teacher writes the answer on the transparency a clear orientation towards the transparency is visible at some point in the temporal

production of the turn-allocation process. In contrast, in those occasions when the teacher checks the response from the book or hears it her gaze is focused towards the selected next speaker.

The most essential feature these response invitations and commands reveal is the teachers' orientation towards the ongoing interaction and the type of an activity taking place. The activity contexts in which these turn-allocations take place do not manifest the same kind of a pre-allocated turn-taking organization for the interaction as in the other activities, where the interaction is based on the ready-made exercises in books or on transparencies. The emergence of response turns, i.e. the sequential actions in which the students' participation is required, are thus not as straightforwardly recognizable to students until the teacher utters a first-pair part that makes relevant the second-pair part (cf. Mortensen under review). The teacher therefore creates such sequential response positions in the course of the interaction. But since students cannot prepare themselves in advance for the questions the teacher might ask, there is the possibility that they will be unable to provide the correct response, and thus the teacher needs to look for other potential next speakers. To that end, the teacher is required to do more interactional work – to display her understanding of the kinds of response turns to invite from students and the ways in which she can accomplish this – in order to bring off the next speaker turn-allocations. She also needs to design the turn-allocations so that the selected students take the response turns when they are not bidding. The above examples reveal how the teacher's turn-allocations are adapted to the preceding interaction and the students' actions: they are constructed to be less face-threatening in that they take into consideration the type of response required as well as a possible escape route for students not to answer. Teacher turn-allocations are therefore very much recipient-designed questions displaying interactional sensitivity to the sequential context and the established participation framework in which they are uttered. The teacher's gaze trajectories are intricately connected to the management of speaker change and the emergent responses alongside the kind of evaluative action the teacher needs to perform and what this entails on her part.

5.2.4 Summary

The above analysis of gaze in teacher turn-allocations has, it is hoped, shown that the role of gaze varies in the distinct turn-allocations that are constructed through different types of verbal elements, such as verbal address terms and questions and statements. It has also shown that gaze seems to be a crucial part of teacher turn-allocations. Teacher's gaze is characteristically directed towards the selected next speaker when teachers employ verbal address terms. However, this only seems to be essential when teachers select next speakers through directing their gaze towards the class and the selected student. During the turn-allocation itself teachers can lower their gaze towards different pedagogical artefacts. Regardless of where the teacher's gaze is directed, in general it seems that turn-allocations are carried out to good effect, as speaker change occurs at

TRP. Another issue is whether the selected student provides the expected response or not.

When teachers employ verbal address terms together with gaze in turn-allocations, both resources function as explicit addressing devices designed to nominate the addressed and gazed-at student as the next speaker (see also Lerner 2003). But the address term in itself is a sufficient addressing device as was shown with turn-allocations which consisted of the student's name and the teacher's gaze-shift. Gaze-shift in such turn-allocations is enacted in anticipation of the forthcoming teacher evaluation, and thus was shown to project the teacher's orientation to it already during the turn-allocation. Effectively, teacher gaze shifts in other types of turn-allocation constructs – i.e. invitations and commands to respond – were also shown to be used for the same purpose: in preparation of the forthcoming response and its evaluation through writing it on a transparency or listening to it.

In comparison to ordinary conversations, the examples have revealed that mutual gaze between the teacher and the selected next speaker is not necessary in bringing off turn-taking in classroom interaction. Where participants do engage in mutual gaze, then it constitutes a potential resource for teachers to decide who is an available and willing next speaker and for the class to gain an understanding of who the recipient is likely to be, but it is not mandatory. Hence, both participants can legitimately direct their gaze at their books or at transparencies. The participants' gaze orientation towards pedagogical artefacts has been shown to indicate the participants' orientation to parallel activities, such as orienting to the forthcoming evaluation or the finding of correct answers in order to be able to take the next turn. These parallel activities render the participants' differential gaze orientations a legitimate activity enacted in adumbration of the accomplishment of the current activity sequence. However, students when they direct their gaze at books to find correct answers need to display their readiness to be next speakers by raising their hands. As such, students employ different embodied means to display their engagement in the evolving interaction.

The above analysis underscores that the use of gaze is essential in the management of turn-taking, as teachers would not be able to select next speakers if they did not direct their gaze towards the class. Neither would they be able to tell the students' level of engagement in the ongoing activity if they could not see the orientation of the students' gaze (i.e. to books, to the teacher or to other classmates). By directing their gaze towards the class teachers gain an understanding of who is bidding and who is not and whose gaze is directed towards the teacher and whose is not. Consequently, the students' gaze orientation and hand-raising practices are sequentially implicative for teachers when next speaker selection and turn-allocation has been made relevant, as they indicate the object of the students' attention and what kinds of participation roles they are constructing for themselves. In other words, the students' gaze orientation reveals to teachers what kind of interactional work they need to perform in order to successfully allocate turns to students. In allocating turns to non-bidding, non-gazing students, there is always a danger

that either these students are not capable of responding or the participants are required to do more interactional work in order to make progress in the activity sequence. Hence, teachers shape their turn-allocations as invitations or commands to respond, but in such ways that they are fitted to the emerging interaction and the established participation framework. Such teacher turn-allocations are fashioned to take the non-bidding, non-gazing status of the students into consideration. In such cases, teachers can employ gaze to secure students' responses and thus effect speaker change. In addition, the shape of the turn-allocation seems to reflect the cognitive level of the response sought from the students. It could be claimed that gaze plays an important interactional role in the establishment of intersubjectivity in classroom turn-taking. It is an interactionally meaningful device that participants employ to successfully achieve speaker change and to negotiate emerging participation frameworks in the classroom.

5.3 Head nod(s) as turn-allocation devices

The use of different types of head nods (together with gaze) is also an embodied resource teachers employ to allocate turns to students. In general, head nods can take a variety of shapes ranging from small lowering movements of the chin to large up and down movements of the whole head. For the present analysis, the shape of the head nod is not important as long as teachers perform a distinct, recognizable vertical head nod during the turn-allocation that has an identifiable intersubjective role for the participants in the current interactional task. The analysis will show that the participants orient to the use of head nod as an interactionally relevant action designed to realize the organization of turn-taking.

A head nod in institutional interaction as a turn-allocation device is always accompanied by teacher gaze directed towards an addressed recipient.[38] The use of head nods is an interesting interactional phenomenon in relation to speaker change as head nods can be employed in a variety of turn-allocation constructs and in different sequential positions. On the whole, a head nod may or may not be accompanied by a verbal action component. In most cases, the verbal component is an address term, i.e. a student's name, which explicitly indicates the next speaker. Other accompanying verbal elements include questions and discourse particles. There are also instances, when already during an initiation, a teacher allocates a turn to a student, and in such cases no verbal TCUs are employed in the allocation. What are used are head nods or pointing gestures (see 5.4 below for pointing gestures). In such cases, the

[38] In my data, head nods are also used in third position evaluative turns to show agreement and to give positive assessments of students' responses. How teacher evaluations are designed through the use of use head nods and pointing gestures in CLIL classroom interaction has been examined by Pehkonen (2008).

insertion sequence 'student bidding–teacher turn-allocation' is achieved concurrently with the primary activity of initiating a new IRE sequence. When such initiations occur, the turn-allocation is designed so that the head nod together with the use of gaze constitutes one of the turn-constructional elements of the initiation, while the two remain interactionally separate, yet overlapping turns-of-action.

Research on head nods and their role in interactional practices has been rare in the CA tradition and in other interactionally oriented research. Most references to head nods and their use in the organization of talk-in-interaction can be found in everyday conversation research (Goodwin 1984; Tiittula 1985; Goodwin & Goodwin 1992; Yang 2007), different institutional interactions (Halonen 1999; Klippi 2006; also Martinez 2000 for political news interviews), medical studies (Heath 1992), and nonverbal communication studies (e.g. Argyle 1988). The research literature on nonverbal communication mainly reports how head nods are used as back-channel signals to show agreement, to display recipiency and to mimic speaker's gesturing (e.g. Argyle 1988: 106–113; in CA also Goodwin 1981; Heath 1992). Within the field of CA, studies have shown that head nods are not only used to indicate recipiency, but also to build different participant positions and intersubjective stance-taking through the organization of turns-of-action in different cultural settings. Recently, in an aphasic study, head nods were shown to be used by aphasics to display their alignment towards the topic of talk and by doing so to use it as a means to close the topical sequence (Klippi 2006). Likewise, Yang (2007) has shown that head nods, alone or in combination with a verbal utterance, are a means to display agreement, affiliation and acknowledgement by the recipients in Chinese conversation. Recipients of story-telling instances have been shown to indicate their continued hearership and co-participation in a story-telling activity when they are engaged in other parallel activities, such as eating, and therefore cannot necessarily portray their recipiency through gaze towards the story-teller (Goodwin 1984).

Characteristically participants' turns-of-action, in which head nods occur, are sequentially located in second turn positions. The use of head nods is therefore for the most part a recipient phenomenon. In contrast, Goodwin & Goodwin (1992) and Heath (1992) have demonstrated that the use of head gestures, and other gestures, encountered among both speakers and hearers have distinct roles in the participants' actions. Head nods can also perform multiple functions in the production of the current action. Participants' reciprocal nodding gestures, for instance, are deployed to establish mutual agreement and heightened involvement in assessment activities, and as such can be used by the participants to build a shared understanding of the ongoing activity (Goodwin and Goodwin 1992: 166–169). Head nods as a means for allocating turns to next speakers has explicitly been described by Halonen (1999) in AA meetings and by Tiittula (1985) in institutional interactions, as was described in chapter 2.

In my data, head nods when used for turn-allocations are sequentially located in the second-pair parts of the 'student bidding–teacher turn-allocation'

insertion sequence, and are basically the teacher's phenomena. When used to allocate turns to next speakers, head nods in a variety of turn-constructional forms clearly direct student action as students are expected to take the floor and to produce a response. On some occasions the head nod is more prominent than at other times, especially when head nods and gaze are used alone without any accompanying verbal action. In the following, I will present examples of the different types of turn-allocation constructs performed in association with a head nod and demonstrate in what kinds of sequences they are used. I will begin with head nods that are used together with address terms and other verbal or vocalization elements, after which I will discuss the use of the head nod as an embodied turn-allocation device on its own.

5.3.1 Head nod and the use of verbal turn-constructional units

According to Lerner (2003: 178), both gaze towards the selected next speaker and use of the address term are explicit forms of address. I would also include head nods in the category of explicit address when they clearly indicate who is being addressed – i.e. in tandem with the current speaker's gaze direction. Head nods when used in combination with a verbal address term and gaze can also be considered as a form of deictic pointing gesture in the same way as pointing gestures made with the hands and arms insofar as the nod is used to indicate an object, or as in this case a person (see Kendon 2004: 199–205). However, I have chosen to treat head nods and pointing gestures as separate embodied resources in the analysis as they seem to have slightly different uses in certain sequential positions in the teachers' turn-allocation practices.

In my data, eleven of the 44 head nod turn-allocations are constructed so that they also contain the name of the selected next speaker together with a gaze directed towards that person. Ten turn-allocations, in contrast, comprise a head nod and a discourse particle or a vocalization construct. The realization of head nods that occur in combination with a student's name varies. In some cases the head nod and the name are performed in tandem, while in others the head nod precedes the student's name. I will provide examples of both kinds below. The final example in this section will illustrate how vocalizations are deployed together with a head nod to allocate the response turn to a student.

When the head nod is produced together with the student's name in teacher turn-allocations, it appears that both modalities accomplish the same action: the identification and the nomination of the selected next speaker. Extract 14 is a case in point. It is from an EFL lesson and the class is going through sentences the students have had to translate from Finnish into English.

(14) English_L2_Keijo

1		(5.1) T LOOKING AT CLASS, THEN DOWN AT HER BOOK
2	T	.hh >(tai) sitte vii↑menen= .hh (or) then the last one {T GAZE DOWN AT HER BOOK

3		=tai miten ratkaista liikakansoituksen ongelma< or how to solve the problem of overpopulation {T GAZE DOWN AT HER BOOK
4	(Pinja)	((coug[hing))]
5	T	[(joka vain) odottaa] (1.0) °pahenemistaan° which is just waiting (1.0) to happen {T GAZE DOWN AT HER BOOK {T LOOKING DOWN AT TP {T GAZE SHIFT TO CLASS
6		(10.3) T LOOKING FIRST AT CLASS THEN MOVES THE TP GAZE DOWN AT IT AT 5.8 SHIFTS GAZE TO LEFT SIDE OF CLASS AND THEN TO RIGHT SIDE AT 8.9 SHIFTS GAZE BACK TO LEFT SIDE KEIJO MOSTLY LOOKING TOWARDS T ONCE GLANCES DOWN AT 9.8 SECONDS KEIJO RAISES HIS HAND
→	T	**Keijo** **{T GAZE TOWARDS KEIJO** **{T SMALL NOD** {KEIJO GAZE TOWARDS T
8	Keijo	uhh (0.3) how to solve the, problem of overpopulation (0.3) {KEIJO GAZE SHIFT DOWN AT BOOK {T GAZE SHIFT TOWARDS TP
9		the catastrophe (0.3) *which* (0.2) only waits to get worse {KEIJO GAZE TOWARDS T
10	T	joo-↑o (0.3) >°joo-o°.h tai sitten just waiting to happen< ye-es (0.3) >yes.h or then just waiting to happen<
11		°on semmonen: mm° fraasi (0.2) tai (0.3) just waiting to become worse is kind of mm expression (0.2) or (0.3) just waiting to become worse

Prior to the teacher's turn-allocation, a long silence has taken place during which the teacher has been waiting for student bids: she has gazed towards the students, repositioned the transparency, and gazed again towards the class from left to right and back again (line 6). Towards the end of the silence, her gaze is focused to the left side of the class. This is where Keijo is sitting. Keijo has been gazing towards the teacher almost throughout the silence and towards the end of it he raises his hand. Keijo seems to be the only one to raise his hand. Immediately noticing Keijo's hand movement, the teacher allocates the turn to him (line 7). The teacher performs the turn-allocation by uttering the student's name and by simultaneously producing a small head nod. The teacher's gaze is also directed towards him. Note that Keijo is also looking towards the teacher during the allocation: thus a possibility exists that the participants establish mutual gaze. Keijo shifts his gaze down towards his book only when he begins his turn (line 8). Consequently, he is able to see the different embodied actions the teacher performs. However, it is difficult to say if he takes cognisance of the head nod per se. In general, such speech co-occurring gestures are not treated by their recipients as interactionally meaningful in their own right as they do not occasion a distinct next move (Streeck 1994; Goodwin 1986: 29–30). Rather the next action is produced as a response to the previous turn-of-action as a

whole and the action it is designed to accomplish, not to its individual turn-constructional components (Streeck 1994: 240). Whether or not Keijo takes notice of the head nod, the turn-allocation is successful as speaker change occurs at the TRP.

Considering that the head nod does not have interactional import in its own right in the turn-allocation, it seems to operate here as a complementary element alongside the address term (see e.g. Kendon 1986, 2000). Although the head nod does not add any new information to the allocation, it does serve to specify the addressed recipient in addition to his name and the use of gaze. Furthermore, the use of the head nod together with gaze creates a primary participation framework between the teacher and the student (particularly if they establish mutual gaze), whereas the verbal part of the turn-allocation clarifies to the whole class the next speaker. More importantly, the head nod is produced in the precise sequential place where the next speaker turn-allocation has been made relevant. For this reason, it plays an important role in the organization of turn-taking. Essentially, all the turn-allocations where a student's name and the head nod are performed in tandem manifest this complementary, yet particular character in so far as the use of the two modalities help build different participation frameworks. A slightly different character is evidenced by head nods that precede the student's name in the turn-allocations. The analysis reveals that such head nods have interactional import as they are acted upon by recipients in and through their next actions (cf. Goodwin 1986).

When teacher turn-allocations are designed to include a head nod followed by a verbal address term (i.e. head nod + name construct), it seems that there is a strong orientation on the students' part towards the head nod as a primary source of information for the turn-allocation. The verbal address term, in such instances, seems to function as a post-specification along the lines of 'just to make clear'. Example 15 provides an explicit instance of such a turn-allocation. The extract depicts a teacher-led discussion about a poem the class has listened to earlier.

(15) English_L2-3_Katja

1		(0.9) T LOOKING DOWN AT HER BOOK
2	T	A::N WHAT DO YOU THINK, IT IS MEANT BY THIS (0.3) LINE {T GAZE DOWN AT BOOK
3		(0.5) he had given her @meaning the wife@ (0.8) a FARM (.) to be still. {T GAZE }SHIFT UP AND THEN DOWN {T GAZE SHIFT UP TO CLASS
4		(2.0) T LOOKING AT CLASS
5	T	can you think of any synonym (0.3) for the word still {T GAZE TOWARDS RIGHT SIDE OF CLASS

6		(1.2) T LOOKING FIRST AT LEFT SIDE OF CLASS THEN SHIFTS GAZE TOWARDS RIGHT SIDE=
		ULLA RAISES HER HAND **KATJA** NOT VISIBLE IN ST. CAMERA
→	T	**=T NODS Kat[°ja°** **{T GAZE TOWARDS KATJA**
8	Katja	[°hiljaa° to keep quiet
9	T	hm↑m (0.5) {T GAZE TOWARDS KATJA
10		he had given (0.5) his WIFE (0.2) a FARM (0.4) to (.) keep her quiet {T GAZE SHIFT DOWN AT HER BOOK {T GAZE SHIFT TO CLASS
11		(2.0) T FIRST LOOKING AT CLASS THEN DOWN AT HER BOOK
12	T	to CALM HER DOWN about the situation.

The teacher's turn-allocation in line 7 is constructed so that the teacher first nods and then utters the selected student's name quietly. What is noteworthy is that the addressed student, Katja, begins to provide her response in overlap with the teacher's turn-allocation before it is completed. In addition, the teacher delivers the latter part of the student's name discernibly quietly and in overlap with the student's turn beginning. Thus, the teacher is already at that point also visually orienting to the fact that the speaker change is taking place there and then. To rephrase, the teacher is only able to say half of the student's name when Katja is already producing her turn, which indicates that she treats the teacher's head nod as an interactional device designed to allocate the next turn to her. It also displays that Katja infers correctly that she is the addressed recipient of the head nod and that the teacher's gaze is directed towards her instead of towards Ulla who is also bidding for a turn, but who is sitting at the centre of the class.

The same type of turn-allocation construct (head nod + name) and response sequence is exemplified in example 16 where the teacher allocates response turns to two different students in lines 13 and 22 by first nodding and then uttering their names. The students' responses show a slightly different pattern than in the above example, but nevertheless indicate the students' orientation towards the head nod as the source for the turn-allocation. In example 16, the teacher's first allocation in line 3 demonstrates the kind of turn-allocation construct described in section 5.2.1 above. The activity depicted in the extract is a translation task: the students are to give English translations of Finnish words listed by the teacher. The English equivalents were mentioned in a text the class has just listened to and here the students need to recall the right words from the text. (They have not been allowed to see the text while listening to it.) The extract thus exemplifies a search for the exact lexical item that was in the text; hence there are several instructional IRE sequences in the activity segment before the proper term is found (line 23). It is worth mentioning that no other students besides those mentioned in the extract raise their hands: only Katja, Konsta and Aatu bid for response turns.

(16) English_L2-3_Katja+Konsta+Aatu

1	T	a:n: the ↓last word {KATJA RAISES HER HAND
2		oikeutettu laillinen (0.2) legitimate {T GAZE DOWN AT TP READING FROM IT {T GAZE SHIFT TOWARDS KATJA
→		Katja {T GAZE AT KATJA
4	Katja	justified {T GAZE TOWARDS KATJA
5	T	T NODS that'[s ↑right. {T MOST LIKELY GAZE TOWARDS KATJA
6	Tomi	[((coughs))
7	T	we could use ↑it {T GAZE TOWARDS KATJA
8		(1.7) T GAZE SHIFT TO CLASS, LOOKS AROUND
9	T	can you <re- (0.3) member> the one that you had in your text? {T GAZE TOWARDS CLASS
10		(1.3) T LOOKING AROUND AT CLASS
11	T	begins with an /el/ {T GAZE TOWARDS RIGHT SIDE {T GAZE SHIFT TOWARDS LEFT SIDE= {KONSTA GAZE DOWN {KONSTA GAZE TOWARDS T
12		(0.9) T GAZE AT CLASS AT LEFT SIDE =KONSTA & AATU RAISE THEIR HANDS HERE KONSTA GAZE TOWARDS T
→	T	**T NODS=°Konsta°=** **{T GAZE TOWARDS KONSTA** {KONSTA GAZE TOWARDS T
14	Konsta	=°legal° {KONSTA GAZE TOWARDS T {KONSTA LOWERS HIS HAND {T GAZE TOWARDS KONSTA {AATU LOWERS HIS HAND
15	T	UHH {T GAZE SHIFT DOWN AT TP
16		(1.0) THERE IS TALK at the background T LOOKING DOWN AT TP
17	T	[that ↑too {T NODS GAZE TOWARDS TP
18	(Kyösti)	[(xxx)
19		(1.5) THERE IS TALK at the background ((SOMEBODY COUGHS)) T GAZE SHIFT TOWARDS THE CLASS, STRAIGHT AATU RAISES HIS HAND AGAIN
20	T	laillinen? legitimate {T GAZE TOWARDS CENTRE OF CLASS

21		(0.5) T GAZE SHIFT TOWARDS RIGHT TO AATU THERE IS TALK at the background
→	T	**SMALL NOD=Aatu** **{T GAZE TOWARDS AATU** **{*AATU BEGINS TO LOWER HIS RAISED HAND***
23	Aatu	*legimate* {T GAZE TOWARDS AATU {T GAZE SHIFT TOWARDS TP
24		(1.0) T LOOKING DOWN AT TP REVEALING THE ANSWER ((might say hmm before revealing)) THERE IS TALK at the background
25	T	legitimate (0.8) l<u>ai</u>llinen oikeutet↑tu (0.8) well done

As we can see from the example, the turn-allocations in lines 13 and 22 take the form of head nod + name, both of these actions performed in quick succession one after the other. In both occasions, the nod is a distinctly performed down and up movement of the head. At the same time when the teacher allocates the turns, she focuses her gaze towards the intended next speakers. The lines 14 and 23 show how the students' responses follow the teacher's turn-allocations. In the first head nod instance in lines 13 and 14, Konsta's response turn latches onto the teacher's turn-allocation in such a way that it almost overlaps the verbal part of the turn (i.e. the end of the student's name). Konsta has been gazing towards the teacher already for some time and notices the teacher's head movement towards the left side of the class (line 12) and also the head nod the teacher performs after Konsta has raised his hand. That Konsta provides his answer immediately illustrates his orientation to the teacher's head nod as the primary form of turn-allocation: an interactional move aimed to allocate the turn to him. In the same way as in example 15, the teacher here utters the student's name rather quietly.[39]

The second head nod allocation that takes place in line 22 is constructed in the same manner. It includes the head nod followed by the student's name, Aatu. The teacher has also directed her gaze towards Aatu. After Aatu has been nominated as the next speaker, he produces his response. However, the response does not latch onto the teacher's utterance. Rather it is produced with a seemingly normal turn-transitional interval, one beat of silence (Schegloff 2007: 67). What demonstrates Aatu's orientation to the head nod as the primary turn-allocation device is the withdrawal of his raised hand already during the teacher's verbal part of the turn-allocation in line 22. The lowering of the hand before the teacher's turn has come to completion and before the TRP projects that Aatu considers himself as the addressed recipient, and thus is ready to take the next-turn at the TRP.[40]

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39 It could also be mentioned here that the participants' actions are clearly aligned in that Konsta does not raise his hand until the teacher's scanning gaze has clearly begun to shift to that part of the class where Konsta is sitting: the left side (lines 11 and 12). In other words, Konsta seems to wait for the teacher's gaze to reach that part of the class, before he raises his hand.

40 Unfortunately, Aatu is not completely in view of the camera, thus it is difficult to say where his gaze is directed, even though his hand movement is visible.

In addition to the noticeable head nods which the students orient to as a means of turn-allocation, one more aspect that plays a role in these turn-allocation sequences warrants attention. Namely, the spatial organization of the class – the students' seating arrangement – and the teacher's head movement vis-à-vis this becomes a factor in the interactional task of allocating turns. In all the turn-allocation sequences in the two examples above the teacher turns her head from one side of the class to another in order to find a bidding student, after which the selection and allocation of the next speaker ensues. In example 15, in line 6, the teacher turns her head from right to left, and after she has done so she immediately allocates the turn to Katja. In example 16, in line 11, the teacher turns her head from right to left, after which Konsta and Aatu raise their hands in line 12. As the teacher has her head and her gaze directed towards the left side of the class, she sees that Konsta raises his hand and thus allocates the turn to him. It is very unlikely that she notices Aatu's hand at this point as Aatu is sitting in the front right quadrant of the class. Aatu, in other words, is sitting on the opposite side of the class from that where the teacher's gaze is directed towards the end of the silence in line 12. For Aatu, the teacher's head direction and the following head nod towards Konsta function as a sign that Aatu is not being nominated as the next speaker. For Konsta, on the other hand, the teacher's gaze direction indicates clearly that he is the addressed recipient of the turn-allocation.

In the second turn-allocation sequence, the teacher most likely notices already in line 19, when she is looking at the centre of the class, that Aatu's hand is raised, and thus focuses her gaze towards the right side of the class (line 21). The turn-allocation follows immediately after she has turned her head to the very front right of the class. The teacher in performing the head shift from the centre to the right needs to shift her head visibly and Aatu is most likely already orienting to this head shift as a sign that he is to be nominated as the next speaker. (He is also at this point the only one bidding for a turn). Next the teacher accepts Aatu's response through revealing the answer, yet immediately after she performs an other-correction that corrects the pronunciation of the word 'legitimate' as Aatu did not pronounce the word in the target fashion (line 25).

The next example illustrates how head nods are used together with verbal turn-constructional elements other than address terms. The use of discourse particles and vocalizations together with the head nod in turn-allocations appears to render the head nod more interactionally meaningful in its own right, as the head nod is then the turn-constructional element that identifies the addressed recipient. Neither discourse particles nor vocalizations have indexing meaning potential in themselves. Discourse particles and vocalizations nevertheless play a role in the turn-allocation as they constitute the verbal turn-constructional element, the audible element, through which the turn-allocation is produced. They also seem to function as 'go ahead' elements giving permission to the nominated student to take the floor.

Example 17 comes from an EFL lesson from an activity where the class is going through correct answers to a listening exercise they have just done. Several students raise their hands to bid for a turn.

(17) English_L1_Kalle

1	T	four? {T GAZE DOWN AT HER BOOK, SITTING BEHIND HER TABLE
2		(1.0) T LOOKING DOWN AT HER BOOK KALLE RAISES HIS HAND, GAZE SHIFT TOWARDS T
3	T	whaddo you say about this one? {T GAZE DOWN AT HER BOOK, SITTING BEHIND HER TABLE {JARI HAND RAISE
4		(1.7) T LOOKING DOWN AT HER BOOK AT 1.1 RAISES GAZE TOWARDS CENTRE OF CLASS KALLE HAND RAISED STILL, GAZE TOWARDS T RIINA RAISES HAND, GAZE DOWN AT BOOK STUDENTS GAZE DOWN AT THEIR BOOKS
→	T	**uh** **{T NODS, GAZE TOWARDS KALLE** {KALLE GAZE TOWARDS T, LOWERS HAND {KALLE GAZE SHIFT DOWN TOWARDS HIS BOOK
6	Kalle	dii. {KALLE GAZE DOWN AT HIS BOOK {T GAZE TOWARDS KALLE {RIINA GAZE SHIFT TOWARDS T, LOWERS HER RAISED HAND
7	T	dii-↑i, accountant? {T GAZE SHIFT DOWN TOWARDS HER BOOK {KALLE QUICK GLANCE TOWARDS T {KALLE GAZE DOWN AT HIS BOOK

The example begins with the teacher initiating a new activity sequence in line 1. She is at the time gazing down at her book. A one-second silence ensues during which Kalle raises his hand shifting his gaze towards the teacher (line 2). The teacher issues another prompt in line 3 still gazing down at her book. In line 4, another silence follows during which two other students raise their hands. The teacher also shifts her gaze towards the class, directly to the centre of the class, where Kalle is sitting. It is most likely that the teacher and Kalle establish mutual gaze at this point, as they are gazing towards one another. The teacher selects Kalle as the next speaker through the vocalization *uh* produced in conjunction with a head nod towards Kalle. The turn-allocation is successful as Kalle responds. He thus interprets the teacher's turn-of-action as accomplishing the work of allocating the next turn to him. But whether it is the nod or the vocalization or their combination that achieves the speaker transfer is difficult to tell (cf. Goodwin 1984; Streeck 1994).

Curiously, although several students are bidding for a turn, the teacher nevertheless employs the head nod in the turn-allocation. When there are several students bidding for a turn, it is always possible that head nods as turn-allocation devices are ineffective as several students might infer that the turn is addressed to them, especially if the bidding students are sitting close to each other. Here the bidding students are sitting in different parts of the class: right,

centre and centre back. Riina, who is sitting at the back of the class, raises her hand to bid, but keeps her gaze focused down at her book, and thus does not visually orient to the ongoing interaction. Consequently, the teacher is able to use the head nod as a turn-allocation device and direct it towards Kalle. The spatial location of the students and their visual displays of availability and orientation to the current activity thus seem to have interactional import for the management of turn-taking.

As the above examples demonstrate, head nods when employed with verbal turn elements can either be performed at the same time as the verbal address term or before the address term. These two differently constructed turns-of-action operate in different ways. When the head nod is used simultaneously with the verbal address term, the head nod helps identify the selected next speaker and strengthen the nomination. Consequently, it does not seem to be treated as an interactional event per se, rather it is part of the design of the current turn-of-action. Therefore, the relevant next action that follows is designed to address the turn-of-action, not its individual constructs (Goodwin 1984; Streeck 1994). In contrast, the head nods that precede the verbal address term seem to function as the primary turn-allocation device as there is a strong orientation on the students' part towards them. In such turn-allocations, it seems that the verbal part of the turn-of-action is rendered redundant by the success of the head nod as a means of allocating turns. However, the use of the student's name can be considered an important feature of the teacher-student relationship in that by using their names, the teacher displays that she knows her students. By not uttering the name of the student, the teacher might indicate that she does not remember it, thus endangering their relationship.

Head nods that occur in conjunction with discourse particles (e.g. okay, yeah, and no and joo (in Finnish)) or vocalizations (e.g. hmm) are most likely oriented to as primary allocation resources, as the verbal TCUs in such cases do not have the identifying function head nods and the use of gaze can attain through interaction. In both cases, the head nods are oriented to as accomplishing the interactional task of allocating next turns, thus occasioning speaker change and the emerging shift in the participation framework. The interactive character of teacher head nods is indicated in particular by the students' delicately timed response actions in example 15, where the student's response overlaps the turn-allocation, and in example 16, where the first response latches onto the allocation and the second is produced at the TRP. In the last case, the lowering of the student's raised hand after the teacher's head nod projects the speaker change that is to occur at TRP.

Interactionally then, head nods as turn-allocation devices are sufficient given that students display their understanding of the role that head nods play in the sequential position in which they are produced. In terms of the interactional organization of IRE sequences it is worth pointing out that the temporal production of the student responses demonstrates how the participants' actions are contingently and reflexively produced. In addition to all this, it is important to note that in order for the head nod to function successfully in these turn-allocation sequences, the participants also need to

establish mutual gaze, i.e. to have visual access to each other's actions, and thereby to create mutual understanding of the interactional task taking place. For this reason, head nods that are oriented to as meaningful events in their own right in turn-allocations (i.e. that precede the address term and that are accompanied by vocalizations) resemble turn-allocations where head nods are used on their own without accompanying audible turn-constructional elements. This is what I will turn to next.

5.3.2 Head nod: an embodied allocation

23 out of the 44 head nod turn-allocations in my data are performed only through the use of head nods and gaze. I have termed these *embodied turn-allocation devices*, or *embodied allocations* in short (cf. Olsher 2005 and his term 'embodied completions'). These embodied allocations are a silent way of allocating turns to next speakers, and consequently rely on the participants' visual co-presence and accessibility to each other's actions. Goodwin (2000b, 2003) has argued that in order for pointing gestures to be interpreted as meaningful acts by interactants, their role in the interaction needs to be contextualized through the interplay of several semiotic resources, such as an actor performing a point, an orientation from the focal interactants to each other's actions and the larger activity at hand. Head nods, like pointing gestures, have to fulfil specific interactional criteria if they are to be interpreted by the participants as interactional devices designed to achieve turn-taking. These prerequisites relate to a) the number of students bidding for a response turn, b) the possibility for the establishing of mutual gaze between the teacher and the possible next speaker, and c) the sequential position within the IRE sequence in which they are performed. The participants' position and visual access vis-à-vis each other are crucial factors in enabling the use of an embodied turn-allocation device. If there is no mutual gaze between the participants, the turn-allocation will not be successful. What is also important, as will be shown below, is the sequential position in which embodied allocations are delivered so that both parties come to a shared understanding of the interactional role of the head nods produced in the ongoing interaction.

The first example demonstrates how embodied allocations are used when only one student is bidding for a turn and that student is gazing towards the teacher. As can be seen from the extract, teachers can employ a head nod to nominate bidding students as next speakers. It also illustrates how the teacher's head nod and gaze direction make explicit to all the participants who the addressed recipient is. The activity under way in the example is grammar teaching. The teacher is sitting behind her table near the overhead projector. She is writing topics and ideas on transparencies as she proceeds in the teaching of points of grammar. The teacher selects the next speaker, Raimo, in line 5 by nodding and gazing towards him.

(18) English_L1_Raimo

1	T	>mites sanositte esimerkiks uhh< how would you say for instance {T GAZE DOWN TOWARDS TP {RAIMO GAZE TOWARDS T
2	(Jari)	aahh {RAIMO GAZE SHIFT AWAY FROM T
3	T	mm köyhät? the poor? {T GAZE TOWARDS LEFT SIDE OF CLASS {RAIMO GAZE SHIFT TO T
4		(3.0) T LOOKING TOWARDS THE CLASS, MORE LEFT-CENTRE SIDE **AT 2.7 T SHIFTS GAZE TOWARDS RIGHT**= RAIMO GAZE TOWARDS T AT 1.7 RAISES HIS HAND (COMPLETELY UP AT 2.5)
→	T	**=T NODS TOWARDS RAIMO, GAZE TOWARDS HIM** {RAIMO GAZE AT T
6	Raimo	the poor {RAIMO GAZE AT T {T GAZE TOWARDS RAIMO {T GAZE SHIFT DOWN AT TP
7	T	hm↑m (0.5) eli, adjektiivista tehää näi= in other words you take an adjective
8		=pannaan määrätty artikkeli mutta nää o (.) köyhät. the poor and add the definite article but these are (.) the poor

From the example we can see how during the silence in line 4, the teacher's gaze is directed towards the centre-left of the class: she is waiting for student bids. Despite her direction of gaze towards the centre-left, the teacher can, with her peripheral vision, detect movements in the right side of the class. This becomes evident through her gaze shift towards Raimo during the silence in line 4 and the latching head nod that follows: the teacher's gaze shift towards Raimo takes place immediately after Raimo has raised his hand completely (at 2.5 seconds into the silence). Raimo is sitting at the right side of the class, and the teacher employs a head nod for the allocation after she has first directed her gaze towards him. The successful accomplishment of the allocation is made possible by the fact that Raimo has been looking towards the teacher since line 3. When he raises his hand to bid for a turn (line 4), he is still looking towards her. He thus has visual access to the teacher and is able to see the teacher's gaze and head nod being directed towards him. When Raimo and the teacher seem to engage in mutual gaze in line 5, they establish a primary participation framework through which the shift in the participation framework takes place. The speaker change takes place accordingly at the TRP, after the head nod has been produced.

As with examples 15, 16 and 17, example 18 demonstrates how the teacher's head nod functions as an effective turn-allocation device when it is produced in a sequentially appropriate position, i.e. one in which the next speaker selection has been made relevant. It is also understood by the

participants as an interactive move accomplishing the interactional task of allocating a next turn. That the speaker transfer takes place at the TRP manifests the establishment of intersubjectivity: the display of mutual understanding of what is happening here at this particular interactional moment.

Another example of a successful embodied turn-allocation where the teacher and the intended next speaker establish mutual gaze during the turn-allocation is provided below. The class is going through different adverbs for purposes of comparison and here the teacher is trying to get the students to express what 'hieman' (little) is in English. The students are writing in their notebooks and none of them have been bidding despite the fact that the teacher has produced a longish initiation through multiple TCUs prior to the extract presented below. Kalle is the only student to bid for a turn. He raises his hand only when he has finished writing in his notebook (line 1) and shifted his gaze towards the teacher (line 2).

(19) English_L1_Kalle

1	T	miten sanottas. how would you say {T GAZE TOWARDS RIGHT SIDE OF CLASS {KALLE GAZE DOWN AT NOTEBOOK, WRITING
2		(2.4) T LOOKING TOWARDS CENTRE OF CLASS, MOST STUDENTS WRITE IN THEIR NOTEBOOKS AT 1.5 KALLE SHIFTS GAZE AT T AT 2.0 RAISES HIS HAND
3	T	mitä o hieman?= what is little {T GAZE SHIFT TO RIGHT, THEN CENTRE {KALLE GAZE TOWARDS T
→		**=T NODS TO KALLE** **{T GAZE TOWARDS KALLE** {KALLE GAZE TOWARDS T
5	Kalle	a little °co[lder° {KALLE GAZE TOWARDS T {T GAZE SHIFT DOWN TOWARDS TP
6	T	[mhh, a little colder {T GAZE DOWN AT TP, WRITING ON IT

In line 1, the teacher issues a prompt to summon bids from the students. However, nobody reacts. The teacher issues another prompt in line 3, during which she first gazes towards the right side of the class and then towards the left. As she turns her gaze to the left, she notices Kalle's raised hand and immediately nods towards him, thus allocating the turn to him. The turn-allocation is successful as Kalle is gazing towards the teacher and is able to see the teacher's head nod and gaze being focused towards him. Kalle's response follows the turn-allocation smoothly at the TRP, which further indicates that he has understood the teacher's nod as a sign for him to take the turn and to respond.

In such cases as these, the head nod is an efficient turn-allocation device, as there is no need to specify in other ways the intended next speaker since

there is no competition from the other students to bid for the response turn. It also seems that for the other students, who are actively participating, i.e. gazing towards the teacher, in the ongoing interaction, it becomes clear who has been selected. In terms of the participants' interactional alignment, in the two examples given above both the teacher and the student treat the teacher's head nod as an interactional device to allocate the turn to the student. This becomes apparent from how quickly and smoothly the students provide their responses after the teacher has performed the head nod and how the teacher accepts these responses.

When an embodied allocation fails to achieve speaker transfer at or slightly after the TRP, it occasions repair (Schegloff et al. 1977). This is demonstrated in example 20, where the teacher in line 4 allocates a turn to Elina by nodding. But as there is no response from Elina at or after the TRP, the teacher initiates another turn-allocation in line 6. The second turn-allocation takes the form of a nod followed by the student's name (recall section 5.3.1 analysis above).

(20) English_L1_Elina + Tuomas

1	T	mites sanositte <u>nuoret</u> how would you say the young {T GAZE DOWN AT TP
2		(6.3) T GAZE SHIFT AT CLASS, LOOKING AT RIGHT SIDE OF CLASS ONE GLANCE TO LEFT SOME STUDENTS WRITING IN THEIR NOTEBOOKS OTHERS LOOKING AROUND AT CLASS
3	T	nuoret the young {T SHIFTS GAZE FROM RIGHT TO CENTRE (ONLY EYES) {T HEAD SHIFT TOWARDS LEFT (THE HEAD HERE)=
→		**=T NODS TOWARDS ELINA** **{T GAZE TOWARDS LEFT SIDE OF CLASS** (ELINA NOT IN CAMERA VIEW)
5		(1.2) T GAZE TOWARDS LEFT SIDE OF CLASS (ELINA NOT IN CAMERA VIEW)
→	T	**T NODS >Elina<=** **{T GAZE TOWARDS ELINA** (ELINA NOT IN CAMERA VIEW)
7	Elina	=(youth) (0.8) ei no {T GAZE TOWARDS ELINA {T GAZE SHIFT AWAY (ELINA NOT IN CAMERA VIEW)
8	T	you::thki mut sit jos me, iha tätä samaa systeemiä käytetää nii youth yes but if we were to use this same system so {T GAZE AT CLASS {T GAZE DOWN {T GAZE TO CENTRE OF CLASS {TUOMAS GAZE UP TOWARDS THE TEACHER {TUOMAS HAND RAISE

→		**T NODS** **{T GAZE TOWARDS TUOMAS** {TUOMAS GAZE AT T
10	Tuomas	the young. {TUOMAS GAZE AT T
11	T	the young {TUOMAS GAZE AT T

From the excerpt, we can see that the teacher's initiation in line 1 does not attract bids for a turn from the students. What follows is a long silence (line 2) and a prompt (line 3), during which the teacher not only shifts her gaze towards the left side of the class, but also her head. It appears that the teacher has noticed that someone is bidding for a turn, as the teacher's eye and head shift occur in quick succession one after the other (line 3). It is as if the teacher checks first with her eye movement to see if anyone is bidding and when she finds out that this is so, she turns her head towards the bidding person and the turn-allocation ensues. However, the teacher's nod in line 4 is not followed by Elina's answer. Rather it is followed by a rather lengthy silence (line 5), during which the teacher continues to gaze towards the left waiting for the selected student to respond. In line 6, the teacher initiates repair and nods once again towards Elina. This time, she also adds the student's name into the turn-allocation. It is only after this that Elina provides the second-pair part, the response, latching it onto the end of the turn-allocation (line 7).

The excerpt is somewhat problematic in the sense that it is difficult to say when Elina bids for a turn and where her gaze is directed when the teacher tries to nominate her in line 4. The reason for this is that Elina is not visible to the student camera at this point, as the camera is directed more towards the right side of the class. However, as there are particular prerequisites that a teacher's head nod as a turn-allocation device needs to fulfil, it seems likely that Elina is bidding for a turn and that she is not gazing towards the teacher in line 4, but is gazing somewhere else. The idea was introduced above that the teacher is sometimes faced with bidding, and thus willing possible next speaker, but non-gazing students as the students' gaze can be directed towards their books. Here, it becomes apparent that Elina is not gazing towards the teacher, since she does not react to the teacher's silent, embodied turn-allocation. As there is no established mutual gaze between the teacher and Elina, the teacher needs to construct her turn-allocation so that she is able to draw Elina's attention to her. This she achieves by using the student's name. In a way, the teacher upgrades the turn-allocation by drawing on several resources – the gaze, the head nod and the student's name – to obtain the intended recipient's attention. The allocation is thus built on both visual and audible action constructs. In addition, it is interesting how evident it seems to be for those students who see the head nod that Elina is the nominated speaker already in the first allocation in line 4 as no one else is here trying to bid for a turn, despite the possibility to do so during the long silence in line 5.

However, the answer Elina provides is not the expected response and, consequently, the teacher initiates a repair sequence in the search for the correct

plural noun. In nominating the next speaker, the teacher again uses a head nod (line 9). This time it is successful as speaker change occurs at TRP. This means that the participants are able to establish mutual gaze and are able to interpret the interactional task of the head nod in its sequential position.

Earlier it was mentioned that the number of the students bidding for a turn influences the possible presence of a head nod as a turn-allocation device. In most cases, it would appear that only one student is bidding for a response turn when head nods (together with gaze) are used. However, there are a couple of instances in my data where several students have their hands raised and the teacher nevertheless deploys a head nod. What is particular in such occurrences is that the students who are bidding are sitting in different sections of the class. The spatial configuration of the class, and the spatial location of the students who are bidding, thus becomes a relevant feature when more than one student is bidding for a turn (cf. also example 16 above). In the following example, the students bidding for a turn are Jari, Kalle and Nadir: the boys are sitting on the right side of the class, while Nadir is sitting on the left side of the class.

In addition to the spatial configuration and its role in achieving speaker transfer through the embodied allocation, the example demonstrates how teachers can perform embodied allocations successfully when they are accomplishing other, simultaneous actions, such as initiations; in other words while they are carrying out the first-pair part of the base adjacency pair 'teacher initiation–student response' of the IRE sequence.

(21) English_L1_Nadir

→	T	STAFF or /stœf/ if you (0.2) pronounce it in American way? {T GAZE SHIFT TO CLASS TO LEFT SIDE **{T NODS TOWARDS NADIR,** **GAZE DIRECTED TOWARDS HER** {KALLE HAND RAISE {JARI HAND RAISE
2	Nadir	henkilökunta staff {T GAZE TOWARD NADIR {T GAZE SHIFT DOWN AT HER BOOK
3	T	°yes° {T GAZE DOWN AT HER BOOK
4		>any other words< meaning the same °thing as staff° {T GAZE AT CLASS, MORE TOWARDS THE RIGHT SIDE

In the example, the teacher initiates a new instructional sequence in line 1 to question the meaning of the word 'staff' in Finnish. At the same time as she begins her turn, the students can be seen orienting to the initiation of the new activity sequence and thus to the next relevant action on their part: the bidding for a turn, as two boy students and a girl student raise their hands (line 1; the girl's hand-raise has not been transcribed as she is not in camera range). The two interactional moves – the teacher's initiation and the students' bidding – overlap in this sequence. From among the three bidders, the teacher allocates

the response turn to Nadir by nodding in her direction (line 1). After the teacher has allocated the turn, Nadir produces her response.

The teacher's embodied allocation is successful despite the multiple next speaker candidates. The reason for this is because Nadir is sitting on the opposite side of the class from the two boys, who also have their hands raised (line 1). As such, when the teacher performs the head nod, Jari, Kalle and Nadir can clearly see that the teacher has explicitly directed her gaze towards the left side of the class, towards Nadir, and that the head nod is designed for her. The differential spatial location of the students makes the head nod a viable resource for the teacher to signal the recipient of her turn-allocation without other specifying elements. In addition, the spatial organization of the bidding students and the teacher's head nod directed clearly to the left side displays to the other students to whom the nod refers. As Goodwin (1986: 35) points out "gestures are one place where the temporal and sequential organization of conversation intersects with its spatial organization". In this example, as in example 17, the importance of the contextual configuration of the class and the spatial location of the bidding students becomes relevant in order for the addressed recipient of the head nod to be interpretable.

It is difficult to say at what point Nadir raises her hand as she is not within the range of either of the cameras during the sequence. Nevertheless, it is assumed that she does bid for a turn as the teacher's behaviour does not mark in any way that she is allocating a turn to a non-bidding student (cf. 5.2.3 above for instances when non-bidding students are allocated turns and the interactional work teachers perform to bring off speaker change). In addition, since Nadir's response immediately follows the teacher's turn-allocation, it can be assumed that Nadir is looking towards the teacher. Hence, the teacher and Nadir have been able to establish mutual gaze as a result of which Nadir has seen the teacher's head nod and understood its function as a turn-allocation.

Example 21 demonstrates another aspect related to head nods as embodied turn-allocation devices. Teachers sometimes use head nods to nominate next speakers already during the first part of the basic IRE sequence – the initiation. In such instances, the initiation and the turn-allocation are two distinct interactional tasks performed simultaneously. That is, the two turns-of-action are produced in overlap. Yet they are realized through two different modalities: the initiation is constructed through verbal means, whereas the allocation is embodied. A glance back at examples 18, 19 and 20 shows that the next speaker allocations were turns-of-action in their own right and were followed by clearly marked silences or TRPs, during which the teacher waited for students to bid for the next-turn. The insertion sequence 'student bidding–teacher turn-allocation' thus took place as a primary activity in its own right. Sometimes, however, students anticipate the next relevant action on their part already before or during the teacher initiation – the bidding for a turn – and raise their hands during the teacher's initiation (see also Sahlström 1999;

Niemelä 2008; Mortensen under review).[41] In such instances, the insertion sequence 'student bidding–teacher turn-allocation' of prototypical IRE sequences is accomplished at the same time as the initiation is performed. This is made possible by the fact that both the student bidding and the teacher turn-allocation take place through embodied actions. The students' responses are then provided directly after the teacher has completed the initiation and the base adjacency pair 'teacher initiation–student response' is contingently performed.

Examples 22 and 23 further demonstrate in what kind of sequences the head nod is delivered at the same time as the initiation, and in what kind of sequential and temporal position it is produced. In example 22, Jari seems to be the only student to bid for a turn.

(22) English_L1_Jari

1		uhh what did Juha say about his qualifications?
2		(3.6) SOME STUDENTS TALK QUIETLY T LOOKING AT CLASS, LEFT SIDE MOSTLY JARI RAISES HIS HAND ((HAND VISIBLE IN CAMERA, NOT FACE))
→	T	was he qualified? {T GAZE SHIFT TOWARDS RIGHT SIDE OF CLASS **{T NODS TOWARDS JARI, GAZE TOWARDS HIM** {JARI GAZE TOWARDS T
4	Jari	he had no experience. {JARI GAZE DOWN AT HIS BOOK {T GAZE TOWARDS JARI
5	T	hm↑m= {T GAZE SHIFT TOWARDS HER BOOK {JARI GAZE TOWARDS T
6	Jari	=he know- he knew a lot (0.5) in theory but (x) he doesn't have (0.5)
7		he (1.2) doesn't have °any [experi]ence°
8	T	[mm]
9	T	in theory but the PRACtical ex[perien]ce is not that good. (0.6)
10	Jari	[yes]

The example illustrates how the teacher initiates the new activity segment in line 1 by asking a content question related to a text the class has just listened to. (The questions are in the book and the teacher reads them from it.) In line 2, there is a silence, during which the teacher is looking at the left side of the class waiting for student bids. Jari is the only one who raises his hand: he is sitting on the right side of the class and is gazing towards the teacher. However, the teacher is looking at the opposite side and does not see his raised hand. In line 3, the teacher reformulates her question, and simultaneously shifts her gaze towards the right side of the class. As she turns her gaze, she notices that Jari is

41 This happens when, for instance, the class is checking or doing exercises, as the students can see from their books or handouts the next subpart of an activity and thus can orient to answering it in advance (Mortensen under review).

bidding for a turn, and consequently, she nods towards Jari allocating the turn to him while she is still uttering the question. The participants have visual access to one another's actions through which they come to a shared understanding of the interactional task that is taking place.

The teacher's embodied allocation in the example occurs when she re-issues her initiation by reformulating the question, thus narrowing slightly the response possibilities slightly (cf. Sahlström 1999: 100–101). More importantly, the embodied allocation is temporally produced towards the end of the TCU, where speaker change is generally projected as the next relevant interactional task (see Sacks et al. 1974). Performing the embodied allocation at such a sequential position enables a smooth speaker transition to be effected as well as speeds up the interaction insofar as the insertion sequence is carried out in overlap with the initiation. In looking back at example 21, we can see that the embodied allocation was similarly issued towards the end of the TCU in line 2. In both examples, the fact that the students produce the response turns after the TRP illustrates their understanding of the interactional role head nods play as next speaker turn-allocations despite the fact that they are delivered simultaneously with the initiations. Their sequential position within the larger interactional organization of the IRE sequence invites a particular interpretation of them as meaningful actions on their own instead of being part of the meaning produced through talk. The embodied allocation is treated as a distinct turn-of-action accomplishing the work of nominating the next speaker (cf. Goodwin 1984; Streeck 1994), and the verbal TCU is a distinct turn-of-action initiating the IRE sequence as well as summoning student bids.

However, not all instances of congruent initiation and embodied allocation are carried out concurrently with first-pair parts. Some of them are employed in extended sequences, where the teacher initiation is directed towards inviting the students to complete the teacher's original question. More importantly, such head nods are basically used to give the already established speaker permission to continue. This finding validates Mehan's (1979: 84) study, who also found that teachers employ head nods to allocate turns to current speakers. Example 23 comes from an EFL lesson from an activity where the class, having listened to a debate, is listing the main points that were brought up by the speakers.

Lines 1–6 of the example represent the first three steps of the instructional sequence. There is a teacher initiation in lines 1–2, a verbal turn-allocation in line 3 followed by a response in lines 4–6. In line 9, the teacher positively evaluates the student's response with the discourse marker *joo* (Eng. yeah).

(23) English_L2_Mikko

1	T	no mitä siitä energian käytöstä (0.6) well what about the use of energy {T GAZE DOWN AT HER BOOK {MIKKO HAND RAISE, GAZE SHIFT TOWARDS HIS BOOK
2		mitä siitä keskusteltii (0.3) what was discussed about it {T GAZE AT CLASS {HANNU HAND RAISE, GAZE TOWARDS CLASS
→		**uhh Mikko** **{T GAZE TOWARDS MIKKO** {MIKKO GAZE DOWN AT HIS BOOK
4	Mikko	(noisko tuo) (0.3) ydinvoima (well is) (0.3) the nuclear power {MIKKO GAZE DOWN AT BOOK
5		(että oikeutettu ku siinä o vähä saasteita mut) (0.9) that it is justified as it produces little pollution but
6		toisaalta ehotettii sitä että (0.4) on the other hand it was suggested that {MIKKO GAZE SHIFT TOWARDS T {T GAZE DOWN AT TP STARTS TO WRITE
7		miten ne ydinjätteet vaikuttaa sitte maaperässä sitte myöhemmin how the nuclear wastes have an effect on the soil later on
8		(2.0) T WRITES ON THE OHP MIKKO GAZE TOWARDS T
9	T	°joo° yeah {MIKKO GAZE TOWADS T
10		(16.0) T WRITES ON THE OHP MIKKO GAZE TOWARDS T ((AT BEGINNING TURNS GAZE TOWARDS HIS NEIGHBOUR, BUT THEN SHIFTS BACK))
→	T	°tuolla tavalla ↓**ja**° that way and **{T GAZE TOWARDS LEFT SIDE OF CLASS** **{T NODS TOWARDS MIKKO** {MIKKO GAZE TOWARDS T ***{MIKKO HAND RAISE***
12	Mikko	ja sit siinä on vielä tosta au- aurinkovoimasta and then there is something about the solar power {MIKKO GAZE TOWARDS T
13	T	joo yeah
14	Mikko	että voisko sitä käyttää enemmän ja that whether it could be used more and
15		(5.6) T WRITES ON THE OHP
16	Mikko	se on täysin saasteetonta mutta [<aika>] vaikeeta it is completely pollution free but very difficult
17	T	[°joo°] yes
18	Mikko	eikä kallista ja (0.3) eikä sitä voi käyttää kaikkialla not expensive and (0.3) it cannot be used everywhere

The activity in question is constructed interactionally so that after each student response the teacher writes it on a transparency. The point is to construct a mind map of a text the class is studying on the basis of the students' responses. Thus, in lines 7–10, the teacher writes what Mikko has just said on the transparency. When she is finished, the teacher raises her gaze to the class and confirms Mikko's answer (line 11). The formulation of her confirmation is built so that in turn-final position there is a continuation marker ↓*ja* (Eng. and) pronounced with a downward intonation. The teacher is clearly expecting elements that will complete the question as the continuation marker leaves room for more items to be named in the response. The teacher's direction of gaze to the class in line 11 confirms this. It is also at this point, at the end of the TCU, that she nods towards Mikko and re-allocates the turn to him: he can continue and complete the answer.

The example also reveals how Mikko orients to/observes the teacher's writing action and how he bids for the possibility to continue as soon as the teacher has stopped writing and is available for participation, i.e. available for seeing who is bidding and for next speaker nomination. The reciprocity of the participants' actions is finely aligned: Mikko does not bid for the continuation until the teacher is ready (i.e. has written the prior answer on the transparency) and the teacher allocates the continuation to Mikko by nodding slightly towards him as soon as she notices his raised hand. She gives him permission to continue, permission that he has invited himself by bidding for a turn.

5.3.3 Summary

The analysis of head nods as turn-allocation devices has revealed that they are a multifaceted resource in the organization of classroom turn-taking. They are employed in different types of action constructs: in combination with address terms, concurrently with a range of discourse particles and vocalizations, and on their own as separate turns-of-action. In the different turn-allocation constructs the interactional role of the head nod differs. Moreover, when head nods are used, they are always accompanied by a teacher gaze directed towards the potential next speaker. Therefore, it could be suggested that head nods can be seen as a form of explicit addressing device (cf. Lerner 2003) as, together with gaze, they clearly indicate who the addressed recipient is. Yet head nods are only used as turn-allocation devices when students are bidding for response turns; they are not used to allocate turns to non-bidders. In considering the interactional work teachers perform when allocating turns to non-bidders (see section 5.2.3), head nods as turn-allocation devices are used in sequential locations where it is evident to the participants who is being nominated through reciprocal gaze. If several students are bidding, head nods are used when the students' spatial organization enables such a turn-allocation, i.e. when there is no confusion about who is being addressed through the head nod.

The role of head nods when deployed in combination with address terms seems to be complementary (see Kendon 1986) as well as interactional in the sense that the teacher and the selected student can explicitly create a primary

participation framework. In other words, the head nod is one of the semiotic resources in the turn-allocation that serves to allocate the next turn and to specify who the addressee is. In contrast, the kinds of turn-allocations in which the head nod precedes the address term (i.e. head nod + name constructs), the analysis shows that head nods gain an important interactional function. This becomes clear if one examines the students' next actions and their temporal production relative to the verbal element in the turn-of-action. Students treat such head nods as turn-allocation devices in their own right and orient towards producing the response already during the turn-allocation. In such instances, the response is delivered either in slight overlap with the verbal part of the turn-of-action, or as latched onto it. Also, the lowering of a student's raised hand during the verbal construct projects the student's emerging speakership at the next TRP. Thus students interpret these head nods as means by which teachers allocate turns to them; thus orienting to the emerging shift in the participation framework. The interpretation of head nods as turn-allocation devices is due to the sequential position in which they are performed, i.e. after the teacher initiation, at which point it is conditionally relevant for students to bid for next turns and for teachers to allocate those turns.

As separate embodied turns-of-action through which teachers allocate turns to students, head nods represent a silent and a visual way to organize turn-taking in the classroom. In order for head nods to acquire interactional meaning they need to fulfil certain prerequisites; these are related to the participants' visual co-presence and access to each other's actions, to the number of students bidding and to the sequential position in which they are delivered (cf. Goodwin 2000b, 2003 for pointing gestures and their interactional meaning). The successful use of head nods as embodied allocations necessitates that the participants are able to engage in mutual gaze, and consequently, to infer that the head nod is meant to function as a turn-allocation device. If there is no mutual gaze, the embodied allocation is a potential trouble source and may call for repair. In performing repair, teachers upgrade their turn-allocations to include both visual and audible resources so that speaker transfer can be achieved successfully.

Because head nods are a silent and a visual way of allocating turns to students, they are an effective resource for teachers when they are engaged in parallel actions, such as initiating new IRE sequences. To allocate turns in such a way influences the unfolding interaction as the insertion sequence 'student bidding–teacher turn-allocation' of the prototypical IRE sequence is accomplished simultaneously there and then, and the second-pair part of the 'teacher initiation–student response' adjacency pair is produced contingently after the initiation. When head nods as embodied allocations are temporally and sequentially produced in overlap with verbal initiations, the two interactional tasks are structured as distinct turns-of-action despite the fact that they are accomplished simultaneously. The analysis displays that both teachers and students orient to these kinds of embodied allocations as interactionally meaningful, which in return demonstrates their mutual orientation towards accomplishing classroom activities as smoothly as possible.

5.4 Pointing gestures as turn-allocation devices

In my data, in addition to head nods, teachers employ different types of pointing gestures, or points in short, in their turn-allocations. Pointing gestures are however not utilized as often as head nods. Yet pointing gestures have shared characteristics with head nods when they are used as turn-allocation devices. First of all, pointing gestures are performed together with gaze directed towards the selected next speaker during the turn-allocation. Secondly, pointing gestures may or may not be accompanied by a verbal turn component. This verbal turn component can be a verbal address term or a discourse particle. Pointing gestures can also be used as embodied turn-allocations without co-occurring verbal constructions. As with head nods, teachers also occasionally allocate turns through the use of pointing gestures at the same time as they are initiating the IRE sequence or evaluating student responses. In such cases, no separate verbal turn-allocation constructs are used in the turn-allocation, and the two interactional tasks (i.e. the initiation/evaluation and the point together with a gaze as a turn-allocation device) remain interactionally separate, though overlapping turns-of-action.

Pointing gestures are generally considered to be deictical gestures that index an object or a person, the location of an object or a direction (Kendon 2004: 199–200). They also take a variety of forms ranging from distinctive whole arm pointing through index finger pointing to small side movements of the thumb (see e.g. Kendon 2004: 199–224). In the classroom context, pointing gestures can involve the use of different types of accessories such as markers, pens or pointers. For the present, the shape of the pointing gesture is not as crucial as the fact that there is a distinct, recognizable point performed during the turn-allocation that has a recognizable interactional role in the current interactional task. Nevertheless, it is acknowledged that points are more prominent when performed with the whole arm than with only the hand. More importantly, only those pointing gestures have been included that are used for the purpose of organizing turn-taking, to identifying the addressed recipient of the allocation. As such, they specifically indicate the student to whom the teacher allocates the response turn and who is to speak next. The meaning and the function of the points in the allocations are understandable and interpretable in the local and physical space of the classroom within the framework of the ongoing activity (see Goodwin 2000b, 20003).

Research on pointing gestures in talk-in-interaction has focused not only on how they index objects and persons in the physical surroundings or beyond, but has also examined how they draw co-participants' attention to relevant domains of scrutiny in order to create meaningful actions. Points, for instance, serve to negotiate what relevant next actions participants expect others to perform and thus to construct shared understandings and interpretations of the

ongoing talk (Goodwin 2000b, 2003; Hindmarsh & Heath 2000). How pointing gestures figure in the turn-taking organization of talk-in-interaction has been studied by Mondada (2007). To my knowledge, she has been the only one to demonstrate how professionals in a particular work setting draw upon pointing gestures as an embodied practice to organize turn-taking by establishing themselves as potential next speakers, i.e. self-selecting themselves. My analysis will illustrate how teachers use pointing gestures as turn-allocation devices in the institutional interaction of classrooms and in what kinds of sequences they are used. The participants are shown to orient to the use of pointing gestures as an interactionally relevant action designed to realize the organization of turn-taking. In the following, I will first describe how pointing gestures are used together with different types of verbal TCUs and what their role is in the turn-allocation. The final section provides an account of pointing gestures as embodied allocations in their own right.

5.4.1 Pointing gesture and the use of verbal turn-constructional units

12 out of the 21 pointing gesture turn-allocations in my data include both a verbal address term (10 instances) or a discourse particle (2 occasions) and a pointing gesture towards the selected next speaker. Gaze directed towards the selected next speaker is also always part of the construct. The combination of the different semiotic resources – the verbal construct, the point and the gaze – functions as an explicit turn-allocation device (see Lerner 2003). However, it will be shown that when looking at the verbal TCUs in such multisemiotic turn-allocations, address terms render the allocations more explicit than the use of discourse particles. In comparison with head nods, pointing gestures, when employed in combination with a verbal address term or with other verbal elements, are always performed at the same time as the verbal component. There are no instances in my data where the point precedes the name completely (cf. head nod + name construct above). In the following, I will provide one example of each type of pointing gesture turn-allocation construct.

The first example demonstrates how the teacher allocates a turn to a student by using the whole arm in the point. The point functions in the turn-allocation the same way as head nods: it is complementary in the sense that it identifies the addressed recipient together with the student's name. More specifically, the point together with gaze serve to indicate to the recipient that she is the next speaker while the student's name in the allocation performs this function for the rest of the class. The example comes from a biology lesson, and the class has been discussing human genetic characteristics in the ongoing activity. In the extract the teacher is questioning the students about different genetic combinations and their effects on people's appearance. In line 1 the teacher initiates a new instructional sequence (*an' this person*) and points with his right hand towards the blackboard where he has written the letters 'bb'. However, before he is able to allocate a response turn, Pauli initiates a repair sequence (line 2) that is related to the previous activity sequence (the teacher wrote the wrong answer on the blackboard). After the repair sequence is

finished (by line 8), the teacher returns to the interactional task at hand: the allocation of the response turn. (There is lot of overlapping talk in the class at the moment and this is visible in the transcript.) Kaija is the only one to bid for a turn.

(24) Biology_Kaija

1	T	an' this person {T GAZE TOWARDS CLASS, POINTING AT BL W/ RH INDEX
2	Pauli	[you mean brown eyes] [probably.] {T GAZE SHIFT TO BL
3	Reija	[(xx)]
4	T	[HUP]
5	Aapo	@<brown e:[yes>@] {T WIPES THE WORD 'BLUE' AWAY FROM BL
6	Aino	[yeah.]
7		(3.2) T WRITES 'BROWN' ON BL KAIJA RAISES HER HAND, GAZE TOWARDS T THERE IS QUIET UNIDENTIFIED TALK from boys
8	Aapo	°dude you're supposed to passive resistant [you (xx)°] {T TURNS AWAY FROM BL AND SHIFTS GAZE TO CLASS POINTING W/ RH INDEX TO BL
9	Pauli	[>yea that's] right<=
→	T	**=Kaija** **{T GAZE TOWARDS KAIJA** **POINTING AT HER W/ LH INDEX** {KAIJA GAZE TOWARDS T
11	Kaija	blue eyes because there's only two °blue (x)° {KAIJA GAZE TOWARDS T {T TURNS TOWARDS BL, LOWERS POINTING HAND
12	T	T WRITES 'BLUE' ON THE BL

The teacher allocates the turn to Kaija in line 10 through multiple means. He utters Kaija's name, he directs his gaze towards her and points with his left hand towards her as is shown in the accompanying picture. The shape of the pointing gesture is somewhat sharp in that it is produced with the whole arm and the index finger is extended in continuation of the arm to direct the point to its exact target (see Kendon 2004: 205–207). In fact, the teacher holds this position until Kaija has begun to respond, thus securing the response. It is only when she has begun her turn that the teacher withdraws the point and orients towards the blackboard in order to write the response there. That Katja produces the response in line 11 illustrates her orientation towards the teacher's actions as an indication that the next turn is allocated to her. Kaija has been

looking towards the teacher from line 7 onwards, where she raises her hand to bid for a turn. She is thus able to see when the teacher turns from the blackboard towards the class in line 8. It is at that point that the teacher is ready to finally orient to the selection and allocation of the next speaker.

The teacher's body position during the turn-allocation can be thought of as a representation of 'body torque' (Schegloff 1998: 536), where the different parts of the body of a participant are differently angled vis-à-vis each other in order to portray differential participation in and orientation to several simultaneous actions. The teacher's right hand, which points to the blackboard, marks the item for which the teacher is seeking the correct response. Thus the blackboard continues to be an important element in the evolving interaction, while at the moment of the turn-allocation it is not primary to it. In contrast, the teacher's left hand, which points towards Kaija constitutes the primary 'activity framework' (Goodwin 2000b, 20003) during the turn-allocation until speaker change occurs. The teacher's hands, which point to the different domains of scrutiny, i.e. the blackboard and Kaija, render them both as co-available and something students can orient to. However, at the sequential position of the turn-allocation, the points are ordered differently.

The type of multisemiotic turn-allocation used in the above example illustrates how teachers aim to make it explicit to all parties present in the multiparty setting of the classroom who is being nominated as the next speaker. In example 24, the use of all three semiotic modes most likely helps the co-participants come to a better understanding of who the next speaker is, as there is quite a lot of noise in the class just prior to the turn-allocation. Nevertheless, it is hard to say whether the point is added onto the turn-allocation because of the noise. What can be said is that the points are used in a complementary relationship to the verbal address term and gaze. As with head nods, it is more likely that students respond to the turn-of-action as a whole with its multiple resources, instead of orienting to points per se (cf. Goodwin 1984; Streeck 1994).

In contrast, in turn-allocations that are constructed through the use of a discourse particle, gaze and a point towards the selected next speaker, the point gains a more interactional role in its sequential position as it is the construct that serves to identify the addressed recipient together with the use of gaze. Discourse particles do not contain such indexing elements, and therefore cannot identify next speakers. But they are an essential verbal part of the turn-allocation as they function as kinds of 'go ahead' signs in the turn-allocations. Example 25 offers a specimen of such an action. It comes from an EFL lesson and depicts a teacher-led discussion activity in which the students are giving their opinions about what kinds of qualities professionals should have.

(25) English_L1_Jari

1	T	and TEACHER? (.) {T GAZE DOWN AT HER BOOK {T GAZE SHIFT UP TOWARDS CLASS {JARI GAZE DOWN AT HIS BOOK
2		everybody has an opinion about teachers {T GAZE TOWARDS RIGHT SIDE OF CLASS {JARI GAZE DOWN AT HIS BOOK
3		(1.8) T LOOKING TOWARDS THE CLASS, SHIFTS FROM RIGHT TO CENTRE SLIGHTLY JARI GAZE DOWN AT HIS BOOK
4	T	an i↑deal teacher, let's begin with {T GAZE AT CLASS {JARI GAZE DOWN AT HIS BOOK
5		(2.4) T LOOKING TOWARDS CENTRE THEN SHIFTS TO LEFT SIDE OF CLASS AT 0.9 BEGINS GESTURING W/ LH HAND TOWARDS GIRLS AT FRONT AT 2.2 GAZE TOWARDS JARI JARI GAZE DOWN AT HIS BOOK FIRST AT 1.1 SECONDS BEGINS TO SHIFT GAZE UP TO T AND THEN AT 1.3 BEGINS TO RAISE HIS HAND
→	T	**so** **{T POINTS W/ LH TOWARDS JARI, GAZE AT JARI** {JARI GAZE DOWN AT T
7	Jari	I think that (0.5) that a (1.0) {JARI GAZE SHIFT DOWN AT HIS BOOK {T GAZE TOWARDS JARI
8		perfect teacher should hav- should have all of these (0.9) {JARI GAZE SHIFT DOWN AT HIS BOOK {JARI GAZE SHIFT TOWARDS T
9	T	quali↑ties {T GAZE SHIFT DOWN AT HER BOOK {JARI GAZE TOWARDS T
10	Jari	yes {JARI GAZE SHIFT DOWN {T GAZE DOWN AT HER BOOK
11	T	a↑ha (0.8) {T GAZE DOWN AT HER BOOK

As we can see in lines 1–2, the teacher initiates a new instruction sequence by asking for opinions about teachers and their qualities. During the silence in line 3, the teacher looks around at the class waiting for students' bids. As no one bids, the teacher reformulates the initiation to apply to ideal teachers (line 4). In the course of the silence in line 5, the teacher once again looks around the class waiting for students to bid, but most students are gazing down at their books not displaying willingness to respond. The teacher even points with an open left hand, palm upwards (see Kendon 2004: 208) towards the girls in the front seat, thereby offering them the next turn, but the girls do not look up at the teacher. At the same time as the teacher is gazing around the class and at the girls, Jari shifts his gaze from his book towards the teacher and immediately begins to raise his hand. By the end of the silence (line 5), the teacher's gaze has

also arrived at the end of the student row where Jari is sitting, and thus she is able to see his raised hand. The turn-allocation ensues at this point.

The turn-allocation is designed so that it includes the discourse particle 'so', the point towards the student and the gaze. The discourse particle seems to function more like permission for the next speaker to take the next turn. It is not identifying in itself the selected next speaker; the point is designed to achieve this. The point is performed with the left index finger, and the teacher's arm rests close to her body. The index finger explicitly indexes the addressed recipient together with the gaze orientation (cf. Kendon 2004: 205–208). In the sequential position where the point together with the discourse particle is produced, it becomes interactionally meaningful in terms of the organization of turn-taking. In other words, the recipient attends to the teacher's multisemiotic turn-of-action as doing the work of allocating the next turn to him. The participants also seem to engage in mutual gaze that further helps the selected next speaker come to an understanding that he is to take the next turn at TRP.

When teachers employ discourse particles together with a point and a gaze, the point appears to be treated by the participants as interactionally relevant. In such cases, points seem to take on a more interactionally meaningful role in the turn-of-action within which they are produced than points used in combination with verbal address terms. I am not suggesting that the point is oriented to in itself by the recipient (Goodwin 1986; Streeck 1994). Rather it is most likely that the whole turn-of-action in its sequential position is inferred by the recipient as doing the work of speaker transfer. The use of such pointing gestures bears resemblance to the use of pointing gestures as turn-allocation devices in their own right, as both are essential in the establishment of intersubjectivity in terms of the realization of the turn-taking organization in the classroom setting.

5.4.2 Pointing gesture: an embodied allocation

Nine out of the 21 pointing gesture turn-allocations in my data are realized solely by the means of pointing gestures (together with gaze), and as such they constitute turns-of-action in their own right. These I have again termed as *embodied turn-allocation devices*, or *embodied allocations* as with head nods. These embodied allocations rely on the participants' visual presence and accessibility to each other's actions. They are therefore silent turn-allocation devices. If they are to be successful in accomplishing speaker transition, they need to fulfil particular interactional prerequisites in like manner as head nods (cf. Goodwin 2000b, 2003). These prerequisites relate to a) the number of students bidding for a response turn, b) the possibility of establishing mutual gaze between the teacher and the possible next speaker, and c) the sequential position within the IRE sequence in which they are performed. The participants' location and visual access vis-à-vis each other are crucial factors in enabling the use of an embodied turn-allocation device. If there is no mutual gaze between the participants, the allocation will not be successful.

When pointing gestures are used as embodied turn-allocation devices on their own, they seem to take place in three types of sequential position. The insertion sequence of the prototypical IRE sequence introduced at the beginning of chapter 5 is one such position. The other sequential positions are the initiation and evaluation turns of the IRE sequence, where they are performed concurrently with the initiation or the evaluation in similar vein as the head nods discussed in section 5.3.2. Pointing gestures, when produced in overlap with, or latching onto the initiation or the evaluation, function in the interactional task of organizing turn-taking, while the initiation commences the instructional sequence and the evaluation, in my examples, initiates a repair sequence. The two interactional tasks remain separate turns-of-action and are achieved through different modalities. The allocation is accomplished through embodied actions (point + gaze) and the initiation or evaluation through talk.

The following example demonstrates how a teacher employs a pointing gesture to allocate a turn. The allocation is accomplished solely through the use of the point and gaze, both of which are directed towards the addressed recipient. Extract 26 is from a biology lesson and the class is discussing heredity and human genetic characteristics. In the extract, the teacher is questioning the class about the biological facts of recessive and dominant characteristics. The extract begins with the teacher standing next to a long table that is on the left side of the room near the students (i.e. he is not in front of the class), and as he begins his initiation in line 1, he begins his gradual movement towards the front of the class.

(26) Biology_Aino

1	T	so WHAT (0.3) these words dominant and recessive,= {T GAZE TOWARDS CLASS STANDING NEXT TO THE SIDE DESK {T GAZE AT CLASS, TAKES 2 STEPS FORWARD
2		=what do they mean. {T GAZE TOWARDS CLASS , TAKES 1 STEP AND HALTS
3		(1.4) T STANDING LOOKING AT STUDENTS AINO RAISES HER HAND, GAZE TOWARDS T
→	T	**T POINTS TOWARDS AINO, GAZE TOWARDS HER** AND TAKES 3 STEPS TOWARDS THE FRONT AINO GAZE TOWARDS T
5	Aino	>could they mean that [when< (.) uhm (.)] [THAT ONE wins over the other] {AINO GAZE SHIFT TO FRONT, LOWERS HAND DOWN {T LOWERS HIS HAND, GAZE TOWARDS AINO {T HALTS STILL LOOKING TOWARDS AINO {T BEGINS TO WALK TOWARDS THE FRONT

6	(Aapo)		[°(xx)° (.) °(xx)°]			
7	(Sanna)			[	°(xxx)°	]
8	Aino	[one the or (against) or]				
9	(Kaija)	[°(xxx)°]				
10	T	yeah				

The teacher issues a question in lines 1–2, adjusting it a little in line 2. At the same time, he moves towards the front of the class. After taking three steps, he halts and, looking towards the students, waits for student bids (line 3). During the silence in line 3, Aino raises her hand and also directs her gaze towards the teacher. In order to perform the gaze shift, Aino has to turn her head towards her right shoulder, as the teacher is standing on the left side of the class. In line 4, the teacher points towards Aino, thereby allocating the next turn to her. At the same time he begins moving towards the front again. He is also still gazing towards Aino. His body is thus mostly angled frontwards, while his head and left arm are directed towards Aino, as can be seen in the picture. The pointing gesture the teacher performs is constructed by using the whole arm to direct the hand towards the selected next speaker, while the index finger is also extended and points towards Aino.

The turn-allocation here is performed wholly through embodied means and the point clearly nominates Aino as the respondent. This becomes evident not only through the teacher's direction of gaze but through the way Aino acts after the teacher's gesture. Namely, Aino begins to give her response immediately the point has accomplished its goal: the teacher only begins to lower his arm when Aino has begun to produce her response and is turning her gaze towards the front (line 5). Aino is thus orienting to the point as an interactional move in the enactment of speaker change. She is able to see that the point is directed towards her, because she is looking towards the teacher. The teacher and Aino arrive at a mutual understanding of what is taking place and speaker change is accomplished smoothly at the TRP. It is also worth pointing out that Aino is the only one to bid for a turn, which can further help her interpret the teacher's action and its sequential implications for her.

At times, teachers resort to pointing gestures as turn-allocation devices so that they overlap with or latch onto the initiation or evaluation turns of the IRE sequence. The difference to the example presented above is that the turn-allocation and the initiation are concurrent. The evaluation and the turn-allocation are similarly concurrent. There is thus no separate insertion sequence taking place within the IRE, rather the 'student bidding–teacher turn-allocation' adjacency pair is enacted at the same time as the two teacher turns. This is made possible by the fact that both the student bidding and the turn-allocation are accomplished through embodied means, whereas the initiation and the evaluation are produced through talk. Pointing gestures that occur with initiations or evaluations seem to also operate on the participants' understanding that this aids the smooth progression of the activity at hand in similar vein as head nods. That is, students orient to their forthcoming response

turns already during the initiation and raise their hands, and this enables teachers to allocate turns to them as they produce their initiation or evaluations. Both these sequential positions for pointing gestures will be exemplified below.

Example 27 illustrates how teachers employ pointing gestures to allocate turns to students in such a way that the point latches onto a teacher initiation. The extract is taken again from a biology lesson. This time the activity is an instructional task related to genitals and their role in human reproduction. The teacher is moving about in the classroom during the activity and in the extract below, he moves from the blackboard to stand in front of the students.

(27) Biology_Reija

1	T	an the function of testis .hh is uhh (.) of course to make sperm cells. {T GAZE AT CLASS {T GAZE SHIFT DOWN AT HIS BOOK {T GAZE SHIFT TO CLASS
2		(1.0) T LEANING ON TAP AND LOOKING AT CLASS
3	T	is there any other function (0.3) °for testis that (0.3) than make uhm° {T GAZE AT CLASS {REIJA WRITING AT NOTEBOOK {REIJA GAZE SHIFT TOWARDS T
4		(0.9) sperm cells.=>do you remember? {T BEGINS TO WALK TOWARDS STUDENTS {T GAZE TOWARDS CLASS {REIJA GAZE TOWARDS T
5	(Aino)	uhhuh {REIJA HAND RAISE
→	T	considering this puberty= **POINTS QUICKLY AT REIJA W/ LH** {T GAZE TOWARDS CLASS {T HALTS IN FRONT OF STUDENTS {PAULI SMALL HAND RAISE GAZE DOWN TO HIS BOOK
7	Reija	the: (.) hormone °(*testerone*)° {REIJA GAZE TOWARDS T, LOWERS HER RAISED HAND {T GAZE TOWARDS REIJA
8	T	testosterone, [yeah {T GAZE TOWARDS REIJA TAKING STEPS BACK
9	Reija	[yeah (the word)

The teacher initiation is here designed as a multi-unit turn during which the teacher first states one of the functions of the testis (line 1) and then moves on to ask about its other functions (lines 3–4). In line 4, the teacher addresses a specific question to the students (*do you remember*) and in line 6 he further narrows the response possibilities: the question presented is only related to puberty. Whilst issuing the question and the initiation in lines 4 and 6, the teacher is walking towards the students, his gaze directed towards them. Consequently, he is able to see when Reija (line 5) and Pauli (line 6) raise their hands. However, Pauli's hand raise is minimal and he is looking down at his book. He basically is not available as a participant as he cannot establish mutual gaze with the teacher. Immediately after the teacher has specified his question

in line 6, he points towards Reija with his left hand and allocates the response turn to her. He is also gazing towards her. The embodied allocation is therefore enacted not at the end of the teacher's TCU, but at the TRP. Because Reija is gazing towards the teacher, she interprets the teacher's point correctly as a turn-allocation addressed to her, and consequently, she produces the answer (line 7). It appears that the teacher and Reija are able to establish mutual gaze and come to an understanding of the interactional action taking place – the turn-allocation.

It is worth pointing out the sequential place where the teacher's turn-allocation occurs. It takes place when the teacher reformulates his initial initiation in such a way that he narrows the scope of the question (*considering this puberty*). The teacher allocates the response turn to the student at this point as the student has shown her willingness and availability to participate by bidding for the next turn during the reformulation. Prior to engaging with the teacher's question, Reija and most other students have been writing in their notebooks and thus have not been gazing towards the teacher. In that way, it could be argued that their orientation to their books has influenced the interaction so that the teacher needs to reformulate the initiation in order to get students to bid (see Sahlström 1999: 100–101). It is only when the teacher has finished his initiation in line 4 that Reija raises her hand in line 5. However, at that point the teacher is still walking towards the class and reformulating the initiation. What follows is that the teacher first halts, and then, after having finished his TCU, allocates the response turn to Reija by pointing towards her.

The same sequential position for the allocation – i.e. specified initiation – is also illustrated in example 28 below. However, the example differs from the preceding one in that the teacher's turn-allocation is unsuccessful. In instances where there is trouble in the realization of turn-taking, the participants initiate repair to bring off speaker transfer. One of the reasons for the unsuccessful allocation accomplished by embodied means can be the lack of mutual gaze, as was demonstrated with head nods above. Another reason is that no one is yet bidding for a turn. That is, teachers can allocate turns to non-bidding students and this creates confusion between the students as to the identity of the addressee. A point can be a very effective method to allocate turns, but when no students are bidding its target is not altogether clear. This is what happens in the next example.

Example 28 is from a biology class and the class is checking a homework exercise. It begins with the teacher reading aloud a question from the book (lines 1 and 2) after which he in line 9 reformulates the question and at the same time points towards two students, who are sitting on the left side of the class in the front row (see the first picture). The two girls, Kaija and Outi, have been gazing towards the teacher from the beginning of the teacher's question in line 1. However, although they are gazing towards the teacher and even though they are able to see that his pointing gesture is directed towards them, it is not apparent to them who is actually being pointed at. This is clear in line 11, where Kaija initiates repair and asks who is to respond. At the same time, Kaija glances at her neighbour, Outi, displaying her uncertainty and awareness that either one of them could be the designated next speaker.

(28) Biology_How does it happen

1	T	<so> hhh how does a baby [get rid of its *wastes* °while inside=] {T GAZE DOWN AT HIS BOOK THAT'S ON THE TABLE {T GAZE SHIFT TO CLASS
2	(Aapo)	[°(xxx)°]
3	T	[=the womb.°] {T GAZE AT CLASS
4	(Aapo)	[°(xx]x)°
5	(Pauli)	(xx)
6	(Pauli)	(just wanted that)
7	(Aapo)	((laughs))
8		(1.1) T LOOKING AT CLASS STANDING BEHIND HIS TABLE *KAIJA GAZE TOWARDS T* *OUTI GAZE TOWARDS T*
→	T	**how does it happen.** **{T POINTS W/ LH, straight hand and finger both, gaze towards left row of students, to front** {ROWAN HAND RAISE, GAZE DOWNWARDS {KAIJA GAZE TOWARDS T {OUTI GAZE TOWARDS T
10		(1.0) T GAZE TOWARDS FRONT OF LEFT ROW STILL POINTING *KAIJA GAZE TOWARDS T* *OUTI GAZE TOWARDS T* ROWAN HAND STILL UP RAULI RAISES HAND SLOWLY, GAZE DOWN AT HER BOOK
→	Kaija	**kuka?** {KAIJA LOOKS AT OUTI {T GAZE TOWARDS THE LEFT SIDE, STILL POINTING TOWARDS STUDENTS
12		(1.2) T LOOKING AT LEFT SIDE OF STUDENT ROW STILL POINTING W/ LH ROWAN HAND STILL UP, SHIFTS GAZE TOWARDS T *KAIJA GAZE TOWARDS T* *OUTI GAZE TOWARDS T*
13	Rowan	[you.] {ROWAN GAZE SHIFT TOWARDS KAIJA
→	T	**[Kaija] for example.** **{T GAZE TOWARDS LEFT SIDE OF CLASS STILL POINTING** {T LOWERS THE POINTING HAND {KAIJA GAZE TOWARDS T {OUTI GAZE TOWARDS T

15	Kaija	<↓uhhhh> {KAIJA GAZE TOWARDS HER BOOK {T GAZE TOWARDS KAIJA, PUTS MARKER END IN MOUTH
16		(2.8) T STANDING MARKER IN MOUTH LOOKING TOWARDS KAIJA RAULI RAISES HER HAND ***REIJA GAZE SHIFT FROM PAPER TOWARDS T***
17	Reija	can I say? {REIJA GAZE TOWARDS T {REIJA HAND RAISE {T GAZE STILL TOWARDS KAIJA?
18	Rauli	>you're [(xx)] (as much)<
→	T	**[ehheh okay.]** **{T GAZE TOWARDS REIJA,** **NODS + POINTS W/ MARKER IN RH** {REIJA GAZE TOWARDS T
20	Reija	what was the question. {REIJA GAZE TOWARDS T, HAND STILL UP {T GAZE TOWARDS REIJA
21	T	[((laughs))] .hh how does a baby get rid of its *wastes* while= {T GAZE SHIFT DOWN AT HIS BOOK
22	LL	[((laughter))]
23	T	=inside the womb. {T GAZE SHIFT TO CLASS
24	Rowan	[wastes]
25	Reija	[it goes] [to the- it goes (.) through the] umbilical cord, an then {T GAZE TOWARDS REIJA
26	Aapo	[°(xxx)°]
27	Reija	it (.) (x) from the- its blood [and] to [the] (.) {T GAZE TOWARDS REIJA{T GAZE SHIFT TO SCREEN
28	Pauli	[(x)] [(x)] (drugs)
29	Reija	mother and then (.) yeah {T GAZE AT SCREEN

What is important in this example is the fact that in its sequential position the teacher's pointing gesture (line 9), although produced concurrently with the specified initiation, is interpreted correctly by Kaija as accomplishing the work of allocating a next turn. But a second long silence elapses before Kaija initiates repair, which in itself indicates trouble vis-à-vis the teacher's turn-allocation.

After Kaija's repair initiator (line 11), the sequence unfolds so that the teacher modifies his turn-allocation to include multiple turn-constructional elements: gaze towards the nominee, a pointing gesture and a verbal address term. The teacher upgrades the turn-allocation by drawing on several semiotic resources, both visual and audible, for the successful achievement of speaker

change and for making it clear to all parties who is the indicated next speaker. Thus in line 14, the teacher re-allocates the turn to Kaija by both pointing towards her and uttering her name (see the second picture). He is also gazing towards where Kaija is sitting. Not only is the teacher uttering Kaija's name, but the turn-allocation is designed to include a turn-final *for example*. It softens the turn-allocation and gives an opportunity for Kaija to decline the turn offered to her, as she has not been bidding for one and thus has not shown willingness to participate in the interaction. The use of *for example* can also indicate that the teacher himself did not have a particular student in mind when he pointed towards the students.

In line 15, we can see that Kaija shifts her gaze towards her book and lets out an 'uhhh' with a falling pitch that displays both her reluctance to take the turn and also her uncertainty about the answer. What follows is that Kaija does not provide an answer and there is a lengthy silence during which the teacher continues to gaze towards Kaija waiting for her response. Kaija, in contrast, continues gazing down at her book, and thus displaying that she is not going to respond. By not providing a response quickly, Kaija renders the floor open to other students – an opportunity Reija reclaims by self-volunteering to respond in line 17. Throughout the beginning of the sequence, Reija has been doing a small test and has not been part of the interaction. Here, however, she raises her gaze towards the teacher and self-volunteers. After Reija has declared her willingness, the teacher shifts his gaze towards her and gives her permission to respond. In other words, he allocates the turn to her (line 19). The turn-allocation contains the discourse particle 'okay' and a point as well as a small nod towards Reija (see the third picture). The turn-allocation is therefore constructed again through multiple semiotic resources: a gaze & point & nod & the discourse particle *okay*. As the interaction unfolds we see that Reija does not quite know what question she is required to answer as she asks the teacher to repeat the question (line 20). After the teacher has read the question from the book (lines 21 and 23), Reija responds.

There are several points in this example that warrant closer inspection. First of all, the sequential position of the first turn-allocation is similar to example 27 above. In both examples, the teacher's turn-allocation coincides with a reformulation of the initial initiation. But here it is produced concurrently with the whole of the TCU, not only at the TRP. Second, when the teacher allocates the response turn in example 28 in line 9 by pointing towards Kaija and Outi, he allocates it to non-bidding students. That is, neither Kaija nor Outi have displayed their willingness to respond by bidding for a turn. Nevertheless, the teacher points towards them. It is at this juncture that the teacher markedly draws on his role as the manager of the social order of classroom interaction: he has a legitimate role as a teacher and as a representative of the institution to nominate a non-bidding student and presumably that student is expected to take the turn and provide an answer (cf. Mortensen under review). The form of the teacher's turn-allocation is what makes this an interesting sequence: why does the teacher use the point as it does not help clarify the designated recipient since the girls are not bidding for

a turn? There are other students who raise their hands during or after the teacher has produced the turn in line 9, but they are on the other side of the aisle (see Appendix 5 for the classroom seating order).

The final point worth bringing up in connection with example 28 is that despite Kaija's uncertainty about the identity of the nominated speaker (line 11) the teacher's turn-allocation seems to be somewhat clearer to other students; i.e. those who raise their hands. Namely, Rowan and Rauli have raised their hands before or during the silence in line 10 and have been bidding on and off since. They have also been following how the situation unfolds while simultaneously displaying their willingness to be possible next speakers. Rowan in particular has been looking back and forth towards the teacher and Kaija. Thus in line 13 Rowan in overlap with the teacher's re-allocation suggests to Kaija that it is in fact her (*you*) who has been selected with the first turn-allocation. Rowan's suggestion is a response to Kaija's repair initiator. By doing so Rowan displays his candidate understanding of the situation and the action behind the teacher's pointing gesture: the turn-allocation and that it is designed to allocate the turn to Kaija.

In addition to initiations, teachers employ pointing gestures to allocate turns to students also when they are evaluating student responses. The point towards the selected next speaker functions as the turn-allocation device, while the evaluation initiates a repair sequence. An example of this type of a turn-allocation is provided in the following. The extract comes from an EFL lesson. The teacher is asking about certain key words in English from a listening task. The students need to give the Finnish equivalent.

(29) English_L1_Nadir

1	T	applicant {T GAZE SHIFT TO CLASS
2		(2.2) T LOOKING AT CLASS JARI RAISES HIS HAND, GAZE FIRST DOWN AT HIS BOOK, THEN SHIFTS TOWARDS T BOYS IN CAMERA VIEW: GAZE DOWN AT THEIR BOOKS
3	T	applicant? {T GAZE TOWARDS CLASS, LEANING FORWARD {JARI HAND RAISED, GAZE SHIFT DOWN AT HIS BOOK {RAIMO HAND RAISE, GAZE DOWN
4		(1.0) T LOOKING AT CLASS, LEANING FORWARD JARI HAND RAISED, GAZE DOWN RAIMO HAND RAISED, SHIFTS GAZE TOWARDS T SOMEONE WHISPERS
5	T	Jar↑mo (0.2) what's an applicant. (0.3) {T GAZE TOWARDS JARMO, LEANING SLIGHTLY FORWARD *{T GAZE SHIFT DOWN AT HER BOOK* {T GAZE SHIFT TO JARMO {RAIMO & JARI LOWER THEIR HANDS
6		any idea? {T GAZE TOWARDS JARMO

7	Jarmo	se on se, hakemus °tai (x)° it is the application or (x) {T GAZE TOWARDS JARMO
→	T	no:? it's not [hake]mus, {T GAZE TOWARDS JARMO {T STRAIGHTENS HERSELF IN THE CHAIR INTO UPRIGHT POSITION **{T GAZE SHIFT TOWARDS LEFT SIDE OF CLASS** **{T POINTS TOWARDS NADIR**
9	(Jarmo)	[(x)]
10	(Nadir)	hakija.= applicant {T POINTS TOWARDS NADIR {T HEAD TURNED TOWARDS LEFT SIDE OF CLASS
11	T	=hakiJA (0.3) APPLICATION <is hakemus.> applicant (0.3) application is application {T WITHDRAWS POINT, SHIFTS HEAD POSITION {T GAZE TOWARDS JARMO

At the beginning of the extract (lines 1–6), we can see how the teacher first introduces the next item to be translated and then allocates a turn to Jarmo by directly asking him what applicant is in Finnish (line 5).[42] In line 7, Jarmo provides his response. However, it is not the correct translation and in line 8, the teacher evaluates the answer by using the direct negative evaluator *no* and continues by specifying that it is not the correct word (cf. Seedhouse 2001, 2004). At the same time as the teacher begins her evaluation, she withdraws from the primary participation framework that she has constructed with Jarmo by leaning quickly backwards away from her table (she is sitting behind her table). Her shift in the body position together with the negative evaluation reveals that the teacher orients towards finding the correct answer, thereby initiating a repair sequence. As she produces the evaluation, she concurrently also orients towards her surroundings so that she is able to see that Nadir is bidding for a turn, and thus allocates a turn to her instead of letting Jarmo suggest a more acceptable answer (cf. Lehtimaja 2007: 146–147).

The turn-allocation in line 8 is accomplished by a pointing gesture towards the selected next speaker. Temporally the point is produced towards the end of the TCU, and as such near the TRP, thus making possible a smooth speaker transfer. That Nadir provides her response directly after the teacher has allocated the turn to her indicates that she has interpreted the teacher's point as a turn-allocation device designed to nominate her. Her response does not quite latch onto the teacher's evaluation, but it comes in overlap with the teacher's pointing gesture (line 10). Nadir's actions not only illustrate her orientation towards the teacher's pointing gesture, but also her orientation towards the teacher's negative evaluation of Jarmo's response as an indication to the other students that the correct response is still to be found and provided. She infers that the evaluation is a repair initiator.

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42 As Jarmo is not in view of the student camera it is difficult to say whether he bids for a turn. However, there are other students who are bidding, as can be seen in lines 2 and 3.

As far as the teacher's gaze is concerned during the evaluation, it is difficult to see whether she has directed her gaze towards the addressed recipient, as her head is behind a student's head and thus not clearly visible to the camera. But her head, and her face, is definitely positioned towards the left side of the class, where Nadir is sitting, by the end of the TCU. Seppänen (1998: 165) suggests that the speaker's head direction also indicates the direction of the speaker's gaze and that recipients, rather than orienting to the speaker's gaze direction per se, most likely orient to the speaker's head direction. While this is not always the case in my data, it could be assumed that here the teacher's gaze is directed to the same direction as her head; the left side of the classroom where Nadir is sitting. The head nod without the teacher's gaze being focused towards Nadir, and without the participants' mutual gaze, would be unsuccessful.

It is also impossible to say at what point Nadir bids for a turn as she is not in view of the student camera. However, it can be assumed that she does bid for a turn, as the teacher orients towards Nadir already during the evaluation and is able to allocate the turn to her while uttering the evaluation through the head nod. (According to the student camera, no other student is bidding for a turn at this point.) Nothing in the teacher's turn-allocation implies that she is allocating a turn to a non-bidding student (cf. section 5.2.3).

5.4.3 Summary

All in all, the analysis reveals that pointing gestures are used in three different types of multisemiotic turn-allocation constructs in my data in the same way as head nods. They are employed with two types of verbal turn-constructional units: verbal address terms, i.e. students' names, and discourse particles. They can also be turns-of-action in their own right, in which case they function as embodied allocations. All these action constructs always involve gaze towards the addressed recipient. They are also always employed when at least one student is bidding for a turn.

The role of pointing gestures in each turn-allocation construct differs. When used with address terms, pointing gestures are in a complementary relation to the current action production and its meaning construction (see Kendon 1986). Alongside the other semiotic resources in the turn-allocation that index the addressed recipient, points help make explicit the selected next speaker and allocate the turn to that student. The use of pointing gestures in tandem with discourse particles impart interactional relevance to points in that together with gaze they constitute the action constructs, which serve to identify the next speaker. The discourse particle itself does not have such meaning potential. What is important to remember with respect to these pointing gestures, as well as to the whole turn-of-action, is that their role becomes interactionally meaningful and understandable for the participants due to the sequential position in which they are performed. Namely, they are interpreted by the participants as turn-allocation devices because the selection and nomination of the next speaker has been made conditionally relevant in

previous turns-of-action. The same finding applies to pointing gestures when they function as turn-allocations alongside gaze. They attain their meaning potential through the sequential position in which they are delivered.

A crucial difference between turn-allocations accomplished by both talk and embodiment and those accomplished by embodiment only is that embodied allocations are a silent and a visual way of allocating turns to students. As such they cannot be achieved to good effect unless the participants engage in mutual gaze and unless there is a student bidding for a turn. The participants need to have visual access to one another's actions in order to interpret points as accomplishing turn-allocation. Lack of mutual gaze is a barrier to the establishment of intersubjectivity and is likely to occasion repair. The repaired turn-allocations are at such sequences upgraded by the teacher to consist of several resources: talk, gaze and other possible semiotic resources. Repair is likewise initiated if there are no students bidding for a turn, and the teacher uses an embodied allocation. Confusion arises when there is no clear indication to who the point is addressed, as in example 28, where the teacher is trying to identify as a next speaker a student who has not shown willingness to be one. If embodied allocations are to bring off speaker change, there needs to be at least one student bidding for a turn, or somehow signalling availability as a potential next speaker. Otherwise the target of the point does not become clear to the students, as there are no other identifying constructs in the embodied allocations.

Because embodied allocations are a silent resource, they can be relied on when teachers are occupied with parallel actions, such as issuing initiations or evaluations through talk (cf. Goodwin 1984). In such instances, the turn-allocation and the initiation or the evaluation remain separate interactional tasks even though performed at the same time. This is made possible by the fact that the two actions are produced through different modalities: the initiation or evaluation through talk and the turn-allocation through embodied resources. Such overlapping actions seem to reveal the participants' online analysis of what the relevant next actions projected through the current turn are, and consequently how they can shape the evolving interaction. That embodied allocations, as well as student bids, are accomplished concurrently with the initiation influences the interaction so that the insertion sequence of the prototypical IRE sequence does not occur in its 'proper' sequential position. In such cases, the 'teacher initiation–student response' adjacency pair is contingently structured, and the instructional sequence progresses smoothly forward.

5.5 Chapter summary

The present chapter has explored the different embodied turn-allocation practices teachers employ in the organization of classroom turn-taking within

activities structured according to the IRE sequence. The analysis has revealed three recurrent embodied resources that teachers draw on: gaze, head nods and pointing gestures. Each resource was described separately in the previous sections to illustrate the kinds of roles they acquire either individually or in different combinations with verbal turn-constructional elements in teachers' turn-allocations. In the present section, I will briefly summarize the findings. But instead of going through them one by one, I will attempt to draw them together. In addition, a short account of the idiosyncratic character of the turn-allocation practices used by the teachers in my data is also provided.

Gaze

In all of the turn-allocations in the current data, gaze has been shown to acquire meaningful functions through interaction, but in distinct turn-allocation constructs its interactional significance for the ongoing interactional task varies. Figure 2 provides an illustration of the interactional role of teachers' gaze in the selection phase and in different turn-allocation constructs.

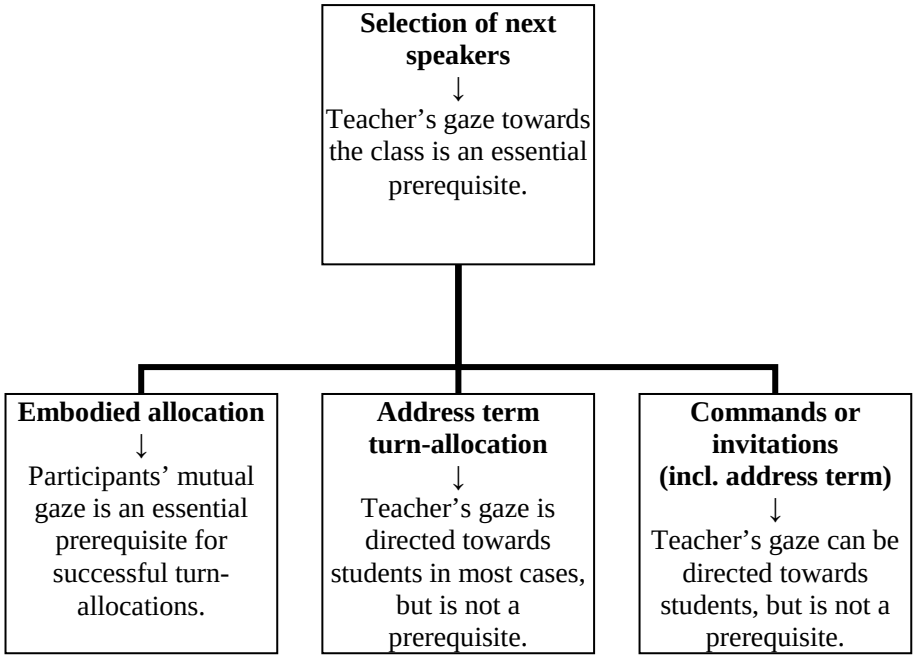

FIGURE 2 A sequentially ordered representation of the role of gaze in the selection phase and in different turn-allocation constructs.

The most significant role gaze plays is in the selection of next speakers. Essentially, the teacher's gaze directed towards the class is a crucial prerequisite for the teacher to be able to select next speakers. By directing gaze towards the class teachers attain an understanding of the students' level of participation in the ongoing activity and of their readiness as well as willingness to be potential next speakers (also Sahlström 1999; Niemelä 2008; Mortensen under review).

In the different turn-allocation constructs, the significance of the direction of gaze of teacher and the students is different. In addition to the selection part of the turn-allocation process, mutual gaze by the participants is an essential

prerequisite in embodied allocations, i.e. in turn-allocations constructed through plain head nods or pointing gestures without accompanying verbal elements other than vocalizations. Embodied allocations are successful in securing speaker transfer only if the participants establish mutual gaze. Lack of mutual gaze is a hindrance to a successful turn transfer, and is likely to occasion repair. In the accomplishment of repair, teachers upgrade the form of the turn-allocation so that it includes both verbal and embodied elements. The participants' reciprocal gaze in embodied allocations is used in explicitly identifying the addressed recipient of the allocation and of bringing off the speaker change. For this reason, it could be suggested that mutual gaze is even more important in managing speaker transfer when embodied allocations are employed in the multiparty setting of the classroom than it is in ordinary interaction and other institutional settings (cf. Goodwin 1981; Lerner 2003; Olsher 2005; Carroll 2006; Halonen 1999).

The teacher's gaze is not a prerequisite in the address term or the invitation or command turn-allocations. On the contrary, teachers' gaze trajectories diverge in different interactional sequences: in most of them, however, the teacher's gaze is directed towards the addressed recipient, but on occasion teachers shift their gaze towards the teaching materials. The vast majority of the address term turn-allocations are performed through the use of a student's name in conjunction with gaze directed towards the selected student. The teacher's gaze in these turn-allocations seems to be an element which, alongside the address term, helps single out the addressed recipient of the teacher's turn-of-action. When produced together with the address term, gaze can be considered as a complementary element, as it does not bring additional, individual meaning to the turn-allocation. However, the use of gaze as an embodied resource directly helps construct a primary participation framework between the teacher and the nominated student. The use of the student's name, the verbal TCU, in contrast, serves to build a secondary participation framework with the rest of the class: it constructs them as ratified participants by making clear to the whole class who the next speaker is. Yet the role of the gaze is not as crucial in these as during the selection of the next speaker or during embodied allocations. This is shown by the fact that teachers can shift their gaze down towards pedagogical artefacts during the different kinds of verbally constructed turn-allocations without endangering the successful accomplishment of turn transfer. The mere use of the student's name is a sufficient turn-allocation device when students are bidding for a turn. In this respect, the role of gaze during the teacher's turn-allocation itself differs from the role it plays in the selection of next speakers.

As far as mutual gaze is concerned, in the institutional interaction of classrooms it seems not to be a necessity when address terms or other verbal turn-constructional units (e.g. questions and statements) are utilized in the turn-allocation, although it can take place. The main reason for why teachers and students are not inevitably required to establish mutual gaze during such turn-allocations, but are permitted to direct their gaze down at their books or at transparencies, appears to be related to the teachers' and students' concurrent

orientation to parallel actions. When the participants are negotiating who is to speak next, teachers simultaneously project the relevant next action on their part: the evaluation of the student response. This is accomplished through a gaze shift down at a transparency or a book during the turn-allocation itself. Students, in contrast, have been shown to direct their gaze down at their books when bidding for a turn. They do this in order to find the correct answers in the books so that they are able to provide a response to the teacher's question in the first place. The participants' differing gaze orientations towards their respective object domains in the accomplishment of turn-taking manifest not only their orientation towards accomplishing the goals set for the current activity, but also their respective participant roles in achieving those goals through the interactional construction of the IRE sequence. But in what sequential contexts, do teachers and students direct their gaze towards pedagogical artefacts?

Each classroom context, or activity in this case, has its pedagogical focus, which is achieved through the reflexive interplay between the organization of interaction and pedagogy, as discussed by Seedhouse (2004). According to Seedhouse (2004: 101–102), the organization of turn-taking, the speech exchange system, differs in distinct L2 classroom contexts because the pedagogical focus in them is different. What my data reveal is that although the speech exchange system is not different from the teacher-led IRE-based activities, there is variation in the participants' gaze-orientation practices; these exhibit differential alignment to the kinds of response actions that are sought from the students. In other words, the participants' actions during the allocation of turns seem to be designed to display their orientation towards the different pedagogical goals of the activities they are all engaged on: the nature of the responses expected f them. Consequently, it appears that when students are to produce short, single item or phrase-length responses, which they do not have to read from their books or notebooks, they are very likely also to direct their gaze towards the teacher before and during the allocation. This is particularly the case when they are clearly displaying willingness to become next speakers by raising their hands. In contrast, when students are to read responses from their books, i.e. the answers are longer than one or two words, they are more likely to direct or maintain their gaze down at their books before or during the allocation.[43] The same applies to teachers when looking at the types of actions they need to perform in order to make known the right answer to the whole class. If teachers are to write the answers on transparencies or if they are to analyse students' longer read-aloud responses as they are produced by orienting to the transparencies, the teachers' turn-allocations reflect the difference in the pedagogical focus. The participants' parallel actions demonstrate their continued awareness of and orientation to the sequential implicativeness of the relevant next actions projected to them already at the time when next speaker selection and turn-allocation has been made relevant.

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43 That students' gaze is directed towards their books can also be because they really do not want to be next speakers, and thus try to avoid establishing any reciprocal gaze with the teachers. But as the present analysis has not touched upon this, no further observations can be made.

They also display the influence these next actions invoke in terms of what is required of the participants in order to produce them. To that end, it appears that teachers and students have a legitimate right not to establish mutual gaze in the achievement of turn-taking, but they are allowed to direct their gaze to artefacts that are relevant for their future actions. But such divergent gaze orientations are feasible only when address terms are used in allocating next-turns to students. In addition, they seem to be used, in the present data, mainly by the EFL teachers.

The analysis has also revealed that within IRE-based activities teachers perform quite a lot of interactional work when they allocate turns to non-bidding students, who are not necessarily gazing towards the teacher. In such cases, the turn-allocations are more elaborate in their verbal design and the teacher's gaze trajectory during the turn-allocation. It seems that the use of plain address terms is not necessarily adequate in instances where students are not bidding for a turn. The verbal form of the turn-allocations varies, but in my data teachers employ, for instance, statements and questions that function as invitations or commands to reply. Some of them are successful; others are not.

What is interesting in the current findings is that gaze alone as a turn-allocation device seems not to be used in whole class interaction, at least not in my data. This can indicate that in the multiparty setting of the classroom more elaborate turn-allocations need to be used so that the addressed recipient of the turn-allocation becomes clear to all the participants. In the whole data, gaze alone, without accompanying verbal or other embodied devices, was used only in two turn-allocations during teacher initiations. Below is one of the two occasions and, as might be expected, it takes place in an extended sequence. The activity depicted in example 30 is from within the teaching of grammar, the comparative forms of adjectives. The teacher has prior to the sequence below asked the class how they would translate the phrase 'Hän on sairaampi tänään' (Eng. He is worse today). Here the teacher asks an additional question related to the adjective 'worse'.

(30) English_L1_Kerttu

1	T	mistäs m<u>uu</u>sta tää worse on (1.8) from what else is this worse from {T GAZE DOWN AT TP, WRITING {T GAZE SHIFT TO CLASS
2		on tota vertailu°muoto° (0.5) °epäsäännölline° (1.1) is like a comparative form (05.) irregular {T GAZE TO LEFT SIDE OF CLASS {T GAZE SHIFT TO CENTRE *{KERTTU MIGHT RAISE A HAND HERE*
→		**mi↑kä muu °sana°** which other word **{T GAZE TOWARDS KERTTU**
4	Kerttu	bad. {T GAZE TOWARDS KERTTU
5	T	<u>bad</u> sanasta the word bad {T GAZE SHIFT TOWARDS TP, LEANS CLOSER TO WRITE ON IT

The teacher solely employs gaze directed towards the student in her turn-allocation while she is still rephrasing her initiation (line 3). The student interprets the teacher's gaze and the verbal TCU as being addressed to her, and thus provides the relevant next action, the response (line 4). Unfortunately, Kerttu is really not that visible in the video as a boy's head blocks her from view, and consequently, it is difficult to say what Kerttu orients to in the teacher's actions. However, the teacher is able to nominate the response turn to Kerttu through the use of gaze as none of the other students in the view of the camera are looking towards the teacher. They are all either writing down in their notebooks or looking down at their books. For this reason, the teacher and Kerttu are able to accomplish the negotiation of the next speaker primarily through the visual mode.

All in all, in my data when teachers allocate turns to next speakers, they draw on several resources to make sure that speaker change takes place to good effect. It appears that the institutional setting of the classroom does not permit the use of too tacit next speaker allocation constructs. This is partly due to the multiparty setting of the classroom, but also due to the fact that several students who are seated in the same section of the classroom may be bidding for a response turn in which case the teacher needs to allocate the turn to one of them as effectively and explicitly as possible. Therefore, teachers appear to employ different types of explicit addressing devices together with gaze to indicate incipient next speakers. More importantly, the different types of multimodal turn-allocations are designed in context-sensitive ways to fit the ongoing interaction.

Head nods and pointing gestures

The description of heads nods and pointing gestures as turn-allocation devices has shown that they are basically used in three different combinations: with verbal address terms, with discourse particles and on their own. As with gaze, within the different combinations these embodied resources attain different levels of interactional meaning. In turn-allocations where address terms are used, these embodied devices are in more of a complementary relationship to the other resources, i.e. the use of gaze and the student's name. All the semiotic resources used serve to identify the addressed recipient, and thus to make it explicit to others who the next speaker is going to be. In contrast, when they feature in turn-allocations performed through discourse particles or vocalizations, head nods and pointing gestures gain more interactional relevance as they through their indexing meaning potential help identify the addressed recipient. The verbal elements in such turn-allocations function to the next speaker as a 'go ahead' sign. Head nods and pointing gestures (together with gaze) when employed on their own without verbal elements are interactional devices in their own right which participants orient to as meaningful in the negotiation of speaker change (cf. Goodwin 1986; Streeck 1994). This is the case also in turn-allocations where head nods precede address terms: the nominated student interprets the head nod as doing the work of

allocating the next turn to him/her. The student responses are then enacted in response to the embodied actions. With turn-allocations that are constructed through both verbal and embodied means, it is most likely that the students interpret the whole turn-of-action as accomplishing speaker transfer.

By and large, the analysis has clearly demonstrated that head nods and pointing gestures are not randomly produced gestures in classroom interaction nor are they conventionalized gestures in the sense that they have meaning potential in themselves beyond their indexing function (Kendon 2004). Instead they exhibit interactionally relevant meaning potential when used in the organization of turn-taking in classroom interaction. Their interactional relevance as embodied allocations springs from the sequential position in which they are delivered within the IRE sequence. Prior to their use the allocation of next speakers has been made conditionally relevant, thereby creating the interactional space for the turn-allocation. Due to their temporal and sequential position of production, students interpret and understand them as carriers of organizational meaning. Consequently, head nods and pointing gestures are designed to be intersubjective insofar as participants are to treat them as resources in the accomplishment of speaker change and in the co-construction of a shared understanding of their role in the evolving interaction. Haddington (forthcoming), for instance, has shown how front-seat passengers employ pointing gestures as meaning-making devices with or without accompanying talk in the negotiation of a next turn at a junction so that drivers interpret them as achieving particular interactive purpose – that of showing where the driver ought to turn next. In similar manner, teachers employ embodied allocations in purposeful ways to allocate next-turns to students. Since students produce the relevant next actions, responses at TRPs, the embodied allocations appear for them to be a legitimate way of allocating turns in the institutional interaction of classrooms.

Also of relevance with respect to embodied allocations is that they are a silent and a visual way of allocating turns to students, and as such their success entails the participants' co-presence and visual accessibility to one another's actions. But at the same time, for this particular reason, they are an effective way for teachers to allocate turns to students while they are carrying out other, overlapping actions through talk. On occasion, this is what the teachers in my data did. They allocated turns to students when reformulating their initiations or when evaluating the students' responses. The two interactional tasks, the initiation/evaluation and the turn-allocation, when performed at the same time remain separate turns-of-action. The initiation or the evaluation is in such instances performed through talk, whereas the turn-allocation is accomplished through embodied means. The differentiation in the interactional tasks is afforded precisely because they are produced through two modalities that employ two different senses, auditory and visual, for their reception (cf. Kendon 2000: 61). This being so, I suggest that in the institutional setting of classrooms in the organization of turns, talk and embodiment can be momentarily fashioned to display a clear division of labour so that different interactional tasks can be performed concurrently. Effectively, the same division

of labour between talk and embodiment is recognisable in turn-allocations where teachers shift gaze down towards pedagogical artefacts during the turn-allocation. In such instances, the teacher's gaze shift is used to project the teacher's next relevant action, the evaluation of the student response, whereas verbal turn-constructional units are employed to allocate the next turn. Furthermore, the use of the two modalities, talk and embodiment, creates different but momentarily overlapping participation frameworks. Namely, the teacher's talk constructs all the students as the primary recipients of the verbal initiation, whereas the embodied allocation builds an emerging participation framework between the teacher and the selected student. Therefore, the temporal position of the embodied allocations within the current verbal TCU is crucial as the allocation is produced towards the end of the TCU, near the TRP where speaker change is generally projected to take place. That participants treat the simultaneous accomplishment of the initiation/evaluation and the turn-allocation as meaningful turns-of-action in themselves, enables participants' coordination between different types of parallel actions to become clearly visible. These parallel actions and their unproblematic realization testify to the routine-like nature and organization of the different classroom activities, further enabling the smooth and efficient progress of the ongoing IRE sequence and the larger classroom activity.

Idiosyncrasies in the use of the different embodied resources

In general, almost all of the turn-allocation constructs described in this chapter are employed by both EFL and CLIL teachers. Yet the different constructs are not used in their respective settings in similar quantities or in a similar manner. As was shown in table 2, the data include 376 turn-allocations altogether; however, there are considerably more turn-allocations in the EFL lessons – 340 turn-allocations – than in the CLIL lessons – 36 turn-allocations. This is above all due to the nature of the lessons and their organization into the different types of classroom activities that occur in the lessons: in the EFL lessons there are more IRE-based activities, and more IRE sequences, than in the CLIL lessons, and consequently more teacher turn-allocations.

Not only does the number of turn-allocations differ between the settings, but the different combinations in which the embodied devices are drawn on by the teachers also diverge. These differences seem to be related to the teachers' idiosyncratic practices, to their individual preferences, but also to the ways in which interaction and pedagogical focus are reflexively tied to each other and how this is displayed through the ways in which different turn-allocations are constructed. Because the present analysis has aimed at identifying the variety of embodied devices teachers draw on in allocating next turns to students, it does not try to determine whether their use is idiosyncratic in the sense that they belong to a particular teacher's repertoire. Nevertheless, a brief discussion on the teachers' individual differences is warranted, and tables 4 and 5 illustrate the distribution of the different embodied devices and the variety of constructions as used by the individual teachers.

TABLE 4 Distribution of the use of head nods as turn-allocation devices by individual teachers.

	Form of head nod turn-allocations			***Total***
Teacher	Head nod (+ gaze)	Head nod (+ gaze) & verbal construct	Head nod (+ gaze) precedes address term	
L1	23	7	1	***31***
L2	-	4	-	***4***
L2-3	-	1	6	***7***
Biology	-	2	-	***2***
Physics	-	-	-	**-**
Total	***23***	***14***	***7***	***44***

Note: Teachers are identified through the transcription codes presented in section 4.3.3.

Table 4 illustrates the use of head nods in the teachers' turn-allocations through the three different turn-allocation constructs identified in the data. Examination of the use of head nods clearly shows that in the EFL lessons L1 employs considerably more head nods as a turn-allocation device than any other teacher in the data (in 31 turn-allocations). She is also the only teacher who uses head nods together with gaze as an embodied allocation. Another EFL teacher (L2–3), in contrast, designs most of her head nod turn-allocations so that the head nod precedes the address term. The L2 teacher deploys only head nods that accompany verbal turn-constructs, both address terms and discourse particles. In the CLIL lessons, only the biology teacher utilizes head nods (twice), while the physics teacher does not use them at all. The table additionally underlines the difference between the EFL and CLIL settings in terms of the number of head nods used: 42 occasions in the EFL lessons and 2 occasions in the CLIL lessons (see table 2 in section 4.6.1).

TABLE 5 Distribution of the use of pointing gestures as turn-allocation devices by individual teachers.

	Form of pointing gesture turn-allocations		***Total***
Teacher	Pointing gesture (+ gaze)	Pointing gesture (+ gaze) & verbal construct	
L1	5	6	***11***
L2	-	4	***4***
L2-3	-	-	**-**
Biology	3	3(1)	***6(1)***
Physics	-	-	**-**
Total	***9***	***12(1)***	***21(1)***

Note: Teachers are identified through the transcription codes presented in section 4.3.3.

Table 5 demonstrates the use of pointing gestures in the teachers' turn-allocations through the two different turn-allocation constructs identified in the data. It shows that only three teachers made use of pointing gestures: two English teachers (L1 and L2 respectively) and the CLIL biology teacher. L2 only made use of pointing gestures in conjunction with address terms and discourse particles. L1 and the biology teacher, however, both employed embodied allocations and allocations with multiple semiotic resources. The table also

clearly shows that the English teacher, L1, uses at least half as many turn-allocations with pointing gestures than the two other teachers who use them. In addition, it highlights the difference in the use of the pointing gestures between the settings: 15 in the EFL lessons and 6 in the CLIL lessons.

In addition to the differences presented in the tables, there is one more difference in the turn-allocations between the teachers. Namely, L1, the EFL teacher, performed quite a few turn-allocations in the IRE sequences when students were not bidding for a turn. These turn-allocations were shown to take the form of statements and questions that functioned as commands or invitations to respond. All the other teachers allocated turns to bidding students in activities structured according to the IRE sequence.

Why such idiosyncratic differences exist between the teachers is difficult to say. They might be due to their personalities and personal preferences, but more lessons by each teacher would need to be observed in order to explore whether such differences remain constant or whether there is more convergence in the teachers' practices. One reason why there are differences is due to the number of IRE-based activities in the settings, as mentioned above. For instance, in the CLIL physics lessons there are only a few IRE sequences where the teacher allocates turns to next speakers, and these turn-allocations are all performed through the use of gaze and address terms. This is clearly noticeable in tables 4 and 5 in that there are no embodied turn-allocations marked for the physics teacher. He did not use embodied devices in his lessons to allocate turns to students per se. But he did, for instance, utilize pointing gestures a couple of times to indicate a student who was to go and write an answer on the blackboard. In such instances, the point was used to specify who had to write and what on the blackboard, not to allocate a turn-at-talk to the student.

6 TEACHERS' MULTISEMIOTIC RESOURCES IN PROJECTING REPAIR WORK

The present chapter centres on describing teachers' multisemiotic repair practices: the ways in which teachers initiate or carry out repair within activities that are primarily structured according to the three-part instructional sequence of IRE. The primary focus is in how teachers project, as well as shape, their emerging third turn repair actions as dispreferred turns-of-action through the use of different embodied resources and pedagogical artefacts that act as mediators in the interaction. The focus is on teacher turns-of-action that address student responses that are somehow inadequate or problematic in the ongoing activity framework and the evolving activity segment. That is, the analysis describes teacher repair actions that are performed when students' responses do not manifest the pedagogical focus of the activity: the preferred answer the teacher is looking for (Seedhouse 2004: 141–143).

By focusing on teacher third turn repair practices, the present chapter reveals the divergent ways with which interaction develops after students have been nominated as next speakers: how the nature and design of the student responses invoke repair as the interaction evolves. As such, the present analysis not only follows sequentially the one begun in the previous section, but it also depicts how teachers display their orientation to the student answers as they are produced and how the teachers' actions are contingently shaped in response to them. In so doing, the analysis will provide a dynamic picture of the different forms the IRE sequence gains in the local exigencies of interaction. It will also shed light on the "local exigencies embedded in the third turn [that] pull into view the unforeseen range of contingent methods of actions that classroom teachers carry out in the evolving sequence of talk" (Lee 2007: 1206).

The decision to focus on only those activities that are structured according to the IRE sequence and where the class is accomplishing tasks is a practical one (see Appendices 2 & 3). It is in these activities that teachers need to assess students' responses in terms of their pedagogical appropriateness vis-à-vis the ongoing activity. These activities also constitute the interactional site for teachers to acquire an understanding of their students' understanding of the

current topic. In addition, the focus activities are essentially mediated through the use of different teaching materials (e.g. books, transparencies, handouts) and instruments (e.g. overhead projector, white screen and blackboard). The analysis will reveal that these pedagogical artefacts reflexively figure in the sequential organization and realization of the teachers' repair actions to the extent that they play a role in how repair is carried out. That is, in some instances the nature and the role of the pedagogical artefact influence the repair trajectory through which repair is accomplished, the realization of the repair action, and also what kinds of repairables are repaired by the teacher and what kinds students are given an opportunity to repair. As such, the different artefacts gain interactional relevance in how the IRE sequence is accomplished and what forms it takes.

By and large, the majority of the repair actions described in the chapter are accomplished through the repair trajectory other-initiated other-repair (cf. Sacks et al. 1977). This is the direct result of my decision to focus on IRE-based activities, where the teacher's role in the organization of repair is more prevalent than in other classroom contexts, where students' participation is not teacher-led (see Seedhouse 2004: 141–159). However, the manner in which this repair trajectory is realized varies greatly with regards to who does the repair. The teacher is always the one to initiate the repair, but the design of the initiations varies. To reveal this variation is basically the empirical task of the present chapter. Trouble sources are repaired either by the teacher or by the students. When teachers perform the repair, it takes the form of teacher-initiated teacher-repair. When students do repair, there are two possible trajectories. The first, of which there are only a few examples in my data, is teacher-initiated self-repair, where the nominated student self-repairs after a teacher repair-initiation. Instead teachers generally solicit correct responses from a third party, in which case the trajectory is that of "teacher-initiated peer-repair" (Seedhouse 2004: 147; see also Kasper 1986). Seedhouse (2004: 148–149) has concluded that such repair trajectories are specific to form-and-accuracy contexts. This is due to the fact that because the teacher is in search of a specific linguistic formula – or a particular content response in the CLIL lessons – when a student is not able to produce the target item, the teacher moves on to a new respondent. As the analysis will show, some of these peer-repairs are carried out so that in most cases the teacher nominates the third party, but there are a couple of occasions when other students self-select themselves as the third party.

The chapter is organized so that section 6.1 introduces two terms that describe the sequential ordering of the teacher repair actions when viewed from a multisemiotic perspective and that form the basis of a new concept I will propose. The analysis is structured according to the sequential ordering of the teacher repair initiators. The analysis progresses from the first sequential position, where repair work can be projected to be in play but, depending on the kind of activity framework engaged on, does not necessarily take place, and then moves on to later sequential positions where it is accomplished. In section 6.2 I will describe how teachers foreshadow the emergence of repair by

withholding the revealing of correct answers during the student second turn responses and by a cut-off body movement at the TRP. The next section illuminates the various ways in which silence is built into the teacher third turn action space, what kinds of embodied orientations teachers perform in the course of it, and how the different realizations of the space invoke diverging repair trajectories (section 6.3). The last empirical section (6.4) focuses on teacher third turn verbal repair initiators and the potential, but not necessary, concurrent embodied actions teachers perform. While the previous sections shed light on the projective nature of teacher embodied actions before the third turn, section 6.4 pulls some of the overlapping features together as well as ties the present analysis and findings to previous repair studies in content, L2 and CLIL classroom interaction.

6.1 The third turn action opportunity space

By adopting a multisemiotic perspective into exploring teacher repair actions as part of the IRE sequence, it is possible to demonstrate how the phenomenon of repair in classroom interaction is more multifaceted and multi-dimensional than described in previous classroom research. The aim of this analytic chapter is to unveil the various sequential positions in which repair is shown to be at play through embodied actions before it is actually initiated or actualized verbally. That is, when and how is repair work projected to take place? At the same time, I will chart the variety of semiotic devices teachers make use of when they initiate and accomplish repair. In order to do this, I need to introduce a new concept – that of the *third turn action opportunity space* – that relies on two previously established terms and understanding of the interactional phenomena behind them. The first term has been proposed by Schegloff et al. (1977: 375) and it is the 'repair initiation opportunity space'. The second is the 'projection space' coined by Schegloff (1984). I will first briefly define both, after which I will explain how they relate to my concept. I will also clarify in the light of this new concept how my repair research relates to earlier classroom research.

Basically, the term 'repair initiation opportunity space' refers to all the potential places in the sequence where repair can be initiated either by self or by other (Schegloff et al. 1977: 375). The first position to initiate repair is the speaker's current turn, the trouble source, and the last is the third turn after the trouble source turn (ibid.). In between, there are several positions in which repair can be instantiated, for instance in the transition space, but is not necessarily done. Schegloff et al. (1977: 375) state that the different "positions are adjacent, each being directly succeeded by a next, some being themselves composed internally of a set of 'sub-positions'". As I understand it, there are thus several potential initiation positions within, for instance, the transition space depending on whose turn the transition space is seen, so to speak, to

belong to. Now, recall that the term 'projection space' refers to "the span in which some element of talk is "in play" before being produced, and with the evidence of that which a speaker's turn may make available to its recipient" (Schegloff 1984: 267). The term then essentially refers to how the speaker's gestures project the production of lexical items before they are produced during the current speaker's turn. Other researchers, however, have shown that recipients of current turns foreshadow through their embodied actions, such as head nods (Heath 1992) and cut-off gaze (Haddington 2006), the nature of their next actions. Also, current speakers employ embodied displays in adumbrating repair work in forward-oriented word searches (Carroll 2006). In other words, interactants employ different types of embodied projection devices to indicate what kinds of actions they are to perform next, or what is to ensue in current turns.

The present analysis will reveal that, as in ordinary conversation, in classroom interaction teachers have the possibility to display in advance during the current speaker's turn-of-action how they are going to respond to it. This is particularly the case when teachers evaluate students' responses by initiating repair. Specifically, I will demonstrate how the evaluative work the third turn of the IRE sequence accomplishes can be carried out in different sequential positions. The first such sequential position is during the student response turn. It was shown in section 5.2.2 that teachers shifted their gaze down towards the teaching materials during the turn-allocation, thereby projecting their anticipation of the student response and their orientation to the evaluation they are to produce after the response. The present analysis will show that simultaneously, by drawing on multisemiotic resources, teachers project how they are going to evaluate the student response. With regards to the sequential organization of repair in classroom interaction, it will be shown that teacher repair actions occupy a wider range of possible sequential positions than previously has been suggested. I argue that there is a particular *third turn action opportunity space*, extending from the student second turn response position through the transition space to third turn position, in and through which teachers can display not only how they evaluate student responses, but also how they accomplish repair actions on the responses when needed.

As was mentioned in chapter 3, classroom interaction research on repair has largely concentrated on describing repair mechanisms, repair trajectories, types of repairs and kinds of repairables, as these are constructed through talk (McHoul 1990; Kasper 1986; Jung 1999; van Lier 1994; Seedhouse 2004; Dalton-Puffer 2007). All of these studies have characterized repair as something initiated in the third turn of the IRE sequence, and hence, it has been described as following the second turn student response that precedes it. To date, only a few studies have investigated the ways in which teachers employ different types of embodied resources to construct locally emergent, situated meanings with regards to repair. Studies that have addressed teachers' repair actions have centred on such interactive phenomena as prosodic patterning (Hellermann 2003; Margutti 2004) and the use of gestures and teaching materials (Pehkonen 2008). No studies have investigated the ways in which teachers prepare to

produce their evaluations in the third turn before the turn is produced. Hellermann (2003) and Margutti (2004) have reported how teacher's silence in lieu of the third turn is interpreted by students as a repair initiator, a display of a dispreferred next action, thereby illustrating how repair can be initiated through the absence of a conditionally relevant next action without there being verbal indications of it at all (see also Macbeth 2000: 39–43). However, as far as I am aware, neither Hellermann (2003) nor Margutti (2004) have described what takes place during the silence that makes students intersubjectively treat it as performing repair. The present analysis will depict what takes place during the silence in terms of the participants' embodied actions, and how these influence how the silence is interpreted. The analysis will also demonstrate how students orient to the different realizations of repair through their actions; that is, their actions indicate their ongoing interpretation of the teachers' actions, which makes visible their understanding of what is taking place as the interaction unfolds.

6.2 Projecting dispreferred next actions during the second turn response and beyond

In this section, I will describe how teachers manifest their dispreferred turns-of-action, the kinds of repair they are to perform on student responses, at the same time as students produce the responses. The analysis illustrates the different semiotic resources teachers draw on in projecting the nature of their conditionally relevant next actions, in this instance the third turn action of evaluating student responses.

As was discussed in chapter 2 both talk and embodiment have been shown to be employed in different types of 'action projections' (Schegloff 1980) by both speakers and recipients. For instance, speakers' embodied actions are employed to project some future action during the current turn-of-action whether it is to do with lexical items (Schegloff 1984), with word searches (Carroll 2006), or with turn-entry or with exiting devices (Streeck 1995, 2009; Mondada 2007). With regards to recipients' embodied projections, they display their converging and diverging alignments towards the current speaker's turn-of-action by performing their reciprocal head nods in conjunction with the speaker or withholding them (Heath 1992). The differentially aligned head nods are intersubjective in the sense that they exhibit the kind of stance the recipient takes towards the speaker's action, and simultaneously project the nature of the recipient's next action. Recipients' cut-off gaze is likewise an intersubjective resource to portray the recipient's disagreeing stance vis-à-vis a speaker's turn (Haddington 2006). Recipients are thus shown to utilize embodied actions as interactive means to foreshadow dispreferred turns-of-action. What I will focus on in this section is initially a recipient's phenomenon – the teacher's phenomenon.

When teachers allocate response turns to students, particularly in the EFL lessons, they orient towards speaker change and the forthcoming response turn by shifting their gaze towards the teaching materials in activities mediated by books and transparencies. However, such a gaze shift towards pedagogical artefacts occurs not only during the teacher turn-allocations (see section 5.2.2), but also at the TRP between the turn-allocation and the response, or at some point during the response turn. There are thus several sequential places in which teachers direct their gaze towards the objects that function as mediators in the interaction. No matter at which point the teacher gaze-shift is enacted, it is always performed for the purpose of comparing the student-produced answer to the sought-for response, which is in general to be found in either books or 'key' transparencies or is to be written on a transparency by the teacher. More precisely, the shift is not only performed in anticipation of the forthcoming third turn action, but it also projects the teachers' orientation to the conditional relevance of the action. Sequentially, the teacher gaze shift co-occurs with the student response, which means that the student's and the teacher's respective interactional tasks are synchronously performed by both parties. However, while the student response is produced verbally, the teacher projects the forthcoming third turn action through other semiotic means: through gaze-shift and an orientation to the material object that constitutes the primary domain of scrutiny (Goodwin 2000a, 2003) and the basis of the teacher's third turn action.

6.2.1 Withholding the revealing of the right answer

The projecting phenomenon at focus in the present section is how teachers, by withholding the revealing of the right answer not only during the student response but also beyond to the teacher third turn action space, display their ongoing interpretation of the students' responses as these are temporally produced. In some of the activities that are mediated by 'key' transparencies teachers hide the correct answers from the students' view, and reveal them one by one by moving a cover sheet on top of the transparency. The continuous observation of such activities helped me realize that when the student responses were correct, and hence teachers were to positively evaluate the responses, they revealed the correct answer from the transparency as the students progressed in the production of the response. In other words, the positive evaluation is concurrently produced with the student response through the teacher's gaze orientation and the use of the artefact. Consequently, teachers oriented to the correctness of the responses through the action of revealing the answer, thus publicly announcing their correctness immediately (see Pehkonen 2008). Likewise, it became apparent that when students' responses contained problems, teachers visibly changed their behaviour vis-à-vis the material and its use in the evolving interaction: they withheld the revealing of the correct answers.

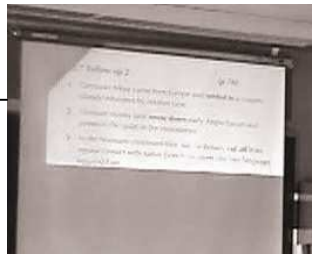
In the following, I will first provide an example of a positive evaluation and how it is projected to emerge already during the student second turn

response, in order to provide evidence that the teacher's gaze shift and the actions following it function as projective devices displaying the teacher's treatment of the response. Once I have shown how this is done, different examples of how the teachers shape their third turn actions when the students' responses are problematic are presented.

Extract 31 comes from an EFL lesson. The class is checking a homework exercise in which the students were to find synonyms for given verbs. The replaceable verbs were to be incorporated into ready-made sentences the students had in their books. The example demonstrates how the teacher orients towards the forthcoming response and the comparison of its correctness to the one provided on the transparency by shifting her gaze down towards the overhead projector.

(31) English_L2-3_Cut off

1	T	.hh number ↑three {T GAZE DOWN AT HER BOOK
2		(2.2) T LOOKING DOWN AT HER BOOK AT 1.6 GAZE SHIFT TOWARDS CLASS
3	T	Katja= {T GAZE AT KATJA
4	Katja	as Normans continue their stay in Britain ={T GAZE SHIFT TOWARDS TP
→		**cut off** from regular contact with native French people **{T REVEALS PART OF THE ANSWER**
6		(the) two languages (begun to fuse) **{T REVEALS REST OF THE ANSWER**
7	(Jussi)	(x[x]x)
→	T	**[hm↑m]** **{T NODS, GAZE DOWN TOWARDS TP**
9		(2.9) THERE IS TALK at the background T LOOKING DOWN AT TP
10	T	they were cut off (0.2) {T GAZE SHIFT TOWARDS SCREEN ((TURNS HEAD TOWARDS SCREEN))
11		they were SEPARATED (1.0) °from (0.9) regular contact° (0.7) {T SHIFTS GAZE FROM SCREEN TO CLASS



In line 3, the teacher allocates the response turn to Katja by looking towards her. When she has done this, the teacher shifts her gaze down towards the transparency in order to be able to compare the student's response to the correct answer (line 4). Simultaneously Katja begins her turn. While Katja reads aloud the sentence written in the book and provides the proper synonym (cut off), the teacher follows the progress of the turn from the transparency. When Katja utters the right synonym (line 5), the teacher almost immediately begins to pull down the cover sheet, and thus begins to reveal the correct answer to the

students (see the first picture in the transcript). As Katja reaches the end of the sentence and the response, the teacher reveals the rest of it (see the second picture). In line 8, the teacher acknowledges the response verbally by uttering a minimal acknowledgement token (*hm↑m*) and nonverbally by nodding her head. Notice how the acknowledgement is performed with a rising intonation (cf. Hellermann 2003; Kleemola 2007). The teacher is still at this point oriented towards the transparency as she has not shifted her gaze towards the class, but maintains her gaze on the transparency. In line 10 the teacher verbally repeats the right answer, while in line 11 she produces the original verb (separated) that was given as a clue in the exercise.

The extract illustrates how the teacher's embodied action of revealing the correct answer is accomplished in relation to the temporal progress of the student response – i.e. the timing of it. The teacher does not reveal the correct answer until the student has uttered the sought-for lexical item (cut off) in the right form. It also shows how the teacher discloses the correctness of the response already at this point through the concurrent revealing of the answer. The ensuing verbal acknowledgement audibly accomplishes the same action in its sequentially relevant place, in the third turn of the IRE sequence. The teacher's embodied actions thus play a crucial role in displaying her stance towards the unfolding response and project its treatment. More importantly, the second turn student action and the third turn teacher action are performed in overlap, while at the same time they are nevertheless enacted for a particular interactional purpose. The difference between the participants' actions is that they are accomplished by employing two modalities: talk and embodiment. It is this division in the construction of the actions that enables synchronous performance (see Kendon 2000). While the student in general produces a verbal response, the teacher partially accomplishes the evaluation through the use of other semiotic resources. The teacher's gaze orientation functions to underline the interactional relevance of the pedagogical artefact in the realization of the evaluation, whereas the revealing of the answer executes the evaluation. This type of concurrent activity construction appears to be highly characteristic of activities organized and mediated through the use of transparencies or books insofar as they enable the simultaneity of the participants' second turn and third turn actions.

Example 31 has provided an example of how a positive teacher evaluation of a student's correct response is constructed to project the preferred nature of the teacher's next action. In cases where the student answer does not match the target form and the third turn action space is therefore instantiated to perform repair work, the interactional tasks are not synchronous any longer in the same way as in the construction of a preferred turn-of-action. In such instances, the teacher's projection of a positive answer does not take place; rather the action of the revealing of the answer is withheld. The absence of the concurrent revealing of the answer is an indication of the emerging dispreferred turn-of-action. Regardless of the turn-organizational trajectory the participants display their respective participatory roles through their actions: the student the role of the current speaker providing a response and the teacher the role of the primary

recipient, as well as that of the imminent next speaker, evaluating the correctness of the current turn by parsing it as it is produced (cf. Mondada 2007).

In contrast to the previous example, the following example will demonstrate how a teacher orients to a student response as incorrect through her embodied action and the use of the pedagogical artefact. The incorrectness of the response becomes apparent when the teacher does not begin to reveal the correct answer during the student response turn, but delays it until she has acknowledged the student turn verbally (line 7). The incorrectness of the response is addressed verbally through the teacher's correction of the student answer. The example is from the same activity as the previous one, and it thus illustrates the visible difference in the teacher's action vis-à-vis the correctness of the answer and the timing of the revealing of the correct answer.

(32) English_L2-3_Clinging[44]

1	T	an the last (2.4) °one? (0.3) {T TURNS GAZE FROM CLASS TO TP TO SCREEN {T GAZE SHIFT TOWARDS CLASS
2		who would like to read this? (0.8) {T GAZE TOWARDS CLASS {EEVA HAND RAISE, GAZE DOWN AT HER BOOK
3		Eeva.° {T GAZE SHIFT TOWARDS TP {EEVA GAZE DOWN AT HER BOOK
4	Eeva	with this kind of change, (0.4) {EEVA GAZE DOWN AT HER BOOK {T GAZE DOWN TOWARDS TP
5		Victorians were nevertheless obsessed with morality (0.5)
6		**cling** on their moral codes more an more (°strictly.°) {EEVA GAZE SHIFT TOWARDS SCREEN
→	T	°↓**hmm**° (0.5) {T GAZE DOWN AT TP **{T BEGINS TO REVEAL THE ANSWER**
8		an we (0.3) would use ing form ↑here= {EEVA GAZE SHIFT DOWN AT HER BOOK {EEVA TAKES HER ERASER
9		=so clinging (0.7) to their moral codes more an more strictly. {T GAZE SHIFT TOWARDS THE SCREEN {T GAZE SHIFT TOWARDS CLASS

In line 3, the teacher allocates the response turn to Eeva. During the turn-allocation, the teacher shifts her gaze down towards the transparency (line 3). As in other similar instances, the teacher orients towards the transparency in order to be able to compare the student answer to the target item and to reveal the correct answer when it is provided by the student. The correct synonym in

[44] The same example was discussed as example 5 in section 5.2.2.

this sequence is 'clinging', but Eeva does not conjugate the verb in the proper form (line 6), and thus the response is not correct. The teacher in hearing Eeva's response does not begin to reveal the answer after Eeva has read the verb. Rather she waits until Eeva has completed her turn before she initiates her next action (line 7). What happens is that the teacher first acknowledges the turn with a minimal acknowledgement token (↓*hmm*), after which she begins to reveal the correct answer (line 7; see the picture where the teacher has revealed the answer). This is instantly followed by an other-initiated other-repair that pinpoints the quality of the trouble source in Eeva's response (i.e. the mistake in the conjugation of the verb, line 8). The teacher thus draws the students' attention to the right form.

McHoul (1990: 365) has pointed out that teacher performed other-corrections are rare in classroom interaction, but when they are delivered, they occur in particular types of activity sequences. Seedhouse's (2004: 146) findings support this as he has observed that teacher-initiated teacher-corrections occur in form-and-accuracy contexts. Here the student's error is morphological; a rather small error, which can be corrected by the teacher without the initiation of a repair sequence. More importantly, because the correct answer is already available on the screen, the respective domain of scrutiny for the students, an additional kind of repair work is rendered futile. For this reason, the teacher-performed repair is more functional in this activity segment (see Seedhouse 2004: 159–162).

It is noticeable that in line 6 Eeva shifts her gaze towards the screen (which is behind the teacher) as she reaches the end of the sentence she is reading aloud. The gaze shift both marks the forthcoming TRP in the turn organization and illustrates her orientation towards the transparency as the source of the right answer. Eeva's gaze shift displays how the teacher's disclosure of the answer is made conditionally relevant as a part of the teacher third turn action within this particular activity framework. The verbal component is only one part of the teacher evaluation. When Eeva's gaze arrives at the screen, she finds that the teacher has not revealed the answer yet, and it is only when the teacher reveals the correct answer (line 7) that Eeva shifts her gaze back down towards her book (line 8). Not only does Eeva shift her gaze, but she also picks up her pencil and an eraser and erases her answer from the book. More importantly, she does this as soon as the teacher has commenced to provide the correction. It therefore appears that she orients to the teacher's embodied action of revealing the right answer and on the basis of what is revealed reacts accordingly without waiting for the teacher's verbal account.[45]

In relation to the pedagogical artefacts and their mediating nature within the ongoing activity, the example explicitly underlines how they are reflexively drawn on by both the teacher and the student to create locally situated

[45] Examination of the other students and their actions indicates that most of them orient towards the screen and shift their gaze from their book between the last part of Eeva's answer or the beginning of teacher correction. When students see the correct answer revealed on the screen, they shift their gaze back down towards their books. Some students seem to do the same thing as Eeva: they rewrite their answers.

meanings in the accomplishment of their respective pedagogical tasks (cf. Goodwin 2000a, b, 2003). The teacher's gaze shift down at the transparency displays how she momentarily establishes its relevance with respect to the forthcoming evaluative action, and how it is deployed by the teacher to compare the response when she follows the progress of the student's response and withholds the revealing of the correct answer. The student, on the other hand, momentarily highlights the interactional relevance of the transparency and its reflection on the white screen by orienting to it as the source of the correct answer. The transparency, and the white screen, thus are both woven into the evolving sequence for the service of accomplishing the interactional and instructional task of the moment.

Example 33 demonstrates another kind of a teacher repair sequence, where the teacher once again withholds the revealing of the answer during both the student response and the third turn teacher action. The withholding displays the teacher's orientation towards the response as not the one she has been looking for. In contrast to the prior example, the teacher's withholding of revealing of the answer goes sequentially further than the second turn response: the teacher does not reveal the answer until the correct answer is provided by a third party. This is due to the activity setting and the nature of the answer: it consists of several parts of which only one is provided by the first respondent.

The example is taken from an EFL lesson, in which the class is going through answers to a listening exercise that has just been done. The teacher has written the right answers to the questions on a transparency (prior to lesson). During the activity, when evaluating the student answers positively the teacher has either revealed the correct answers from the transparency already during the response or during the evaluation (roughly). Depending on the length and depth of the student response, the teacher has initiated extended sequences to obtain further answers. In all the other cases, the teacher has evaluated the given student responses positively and has visibly oriented towards the transparency and the revealing of the answers during the response turns. That is, the student response, and the embodied projection of the forthcoming positive evaluation have been synchronously produced. Example 33 differs from such a practice insofar as it displays how the teacher orients differently towards the adequacy of the student answer through her embodied action.

(33) English_L2_Behavioural problems

1	T	.hh ↓noo minkälaisena (0.6) käyttäytymisenä ongelmat esiintyvät (0.5)
		.hh well in what kinds of behaviours do the problems appear
		{T GAZE DOWN, READING FROM HER PAPER, STANDING BEHIND HER TABLE
		{T GAZE SHIFT TOWARDS CLASS
		{HANNU HAND RAISE
		GAZE TOWARDS T
2		Hannu
		{T GAZE TOWARDS LEFT SIDE OF CLASS
		{HANNU GAZE SHIFT TOWARDS BOOK
		{LIILIA HAND RAISE

3 Hannu no ainakin sillee se henkilökohtanen elämä (0.5) °(x) kärsii (xx)°
well at least so that the personal life (0.5) °(x) suffers (xx)°
{HANNU GAZE SHIFT TOWARDS T
{KEIJO HAND RAISE
{T GAZE SHIFT TOWARDS TP, LEANS CLOSER TO IT
{T HAND IN POSITION NEXT TO TP

→ T **kyl↑lä (0.2) #joo.# (0.6)**
yes (0.2) yes (0.6)
{T GAZE SHIFT TOWARDS LEFT SIDE OF CLASS
{T NODS
{T GAZE SHIFT TOWARDS CENTRE
{T GAZE SHIFT TOWARDS RIGHT SIDE OF CLASS
{SAIMI & PINJA RAISE THEIR HANDS

5 T uhh Linda
{T GAZE TOWARDS RIGHT SIDE OF CLASS
{LIILIA HAND RAISE, GAZE TOWARDS T

6 Linda fyysisiä ja psyykkisiä ongelmia (0.2) niinku (0.7)
physical and psychological problems (0.2) like (0.7)
{T GAZE SHIFT DOWN TOWARDS TP
{LIILIA LOWERS HER HAND

7 voi muistuttaa jopa huumeriippuvaista ja sitte (0.3)
can resemble even a drug addict and then (0.3)

8 viettää tunteja ja jopa viikonloppuja (xx)
spends hours and even weekends (xx)

→ T joo (.) kyllä, (0.8)
yes (.) yes (0.8)
{T LEANS FURTHER DOWN TOWARDS TP, GAZE TOWARDS TP
{T REVEALS THE ANSWER

10 T tässä on nyt vähä °yleisemmin (0.8) ilmaistu° just noita (0.2)
I have those here on a slightly more general level
{T GAZE DOWN TOWARDS TP {T GAZE SHIFT TOWARDS CLASS

11 T eli sielä paljo löyty asioita eli
so there are many things so

12 .hh ajankäyttö ongelmi↑a (0.2) uhh
.hh problems with using time (0.2) uhh

13 (Sonja) ((cou[ghs))]

14 T [(x) (amm]attiinsa) yksityiselämäänsä ja fyysisen terveytensä
(x) (profession) private life and physical health

15 tavallisesti muistuttaa (1.3) >huumeri-< aineriippuvuutta
generally resembles (1.3) drug- drug addict

From the extract, we can see how the teacher allocates the response turn to Hannu in line 2 by uttering his name and looking towards the left side of the class where Hannu is sitting. When Hannu begins his response (line 3), the teacher shifts her gaze down towards the transparency and positions her hand close to the transparency and the cover sheet. The shift displays the teacher's orientation towards the response and projects its comparison to the one she is looking for: the teacher with her actions positions herself so that she is able to accomplish the revealing of the answer from the transparency. Hannu's response is, however, short and offers only one answer to the question in rather

general terms (*no ainakin sillee*; line 3). In other words, he does not provide a precise answer to the question the teacher asks.

What happens is that the teacher shifts her gaze towards the left side of the class before acknowledging Hannu's response both verbally and nonverbally (line 4). The acknowledgement is constructed as emphatic with pauses: the teacher accepts the response by uttering *kyllä* ('yes') with an explicit upward intonation and by nodding her head slightly. After a short pause, she rephrases the acknowledgement with a confirming particle (#*joo*#, 'yes'; Kurhila 2003: 78). According to Kleemola (2007: 78), various discourse particles, such as 'joo', are used by teachers to acknowledge student responses in Finnish classroom interaction. When the discourse particles are produced with an upward intonation, they evidence that there is more to come: the student answer is not exactly what has been sought for (Hakulinen et al. 2004: § 800 as cited by Kleemola 2007: 79; although cf. example 32). At this point the teacher also shifts her gaze towards the centre of the class. All these semiotic resources used indicate that the answer is acceptable, but not adequate: the teacher is still looking for something else. Effectively, this is already conveyed by the syntactic formulation of the teacher's initiation in line 1 that is designed to produce multiple answers, whereas Hannu only provides one.

In the next instance, the teacher turns her gaze towards the right side of the class and allocates a further response turn to another student (line 5). As Linda produces her response, the teacher shifts her gaze down towards the transparency (line 6). It is only after Linda has given her response (lines 6–8), which is approximately the one sought-for, that the teacher evaluates it by a multi-unit turn and reveals the correct answer from the transparency (line 9). In order to reveal the answer the teacher bends further down towards the overhead projector and keeps her gaze down towards it as well. At the same time, she produces a verbal acceptance of the answer. Notice how this time the structure is the opposite from that in line 4: *joo (.) kyllä,* (line 9). The turn is produced with a falling intonation pattern that marks the response as sufficient and accepted (see Kleemola 2007: 79). The turn continues with the teacher's specification that the things written on the transparency are more general than the ones Hannu and Linda have provided (line 10). In lines 11–15, the teacher rephrases the correct answer by listing the different elements.

The other students' reaction to the teacher's evaluation of Hannu's response and how her actions are shaped in accomplishing it display their interpretation of the answer as not sufficient. Namely, some of the students raise their hands after the teacher's acknowledgement (line 4). The raising of their hands to bid for a turn illustrates how they interpret, first of all, the teacher's prosodic turn packaging, and secondly, her embodied actions as signalling the insufficient nature of Hannu's answer (e.g. Margutti 2004: 419). Routarinne (2008: 429) has observed that while teacher third turns are shaped as accepting through their linguistic form, their sequential location, and temporal and multisemiotic production are used to invoke another kind of meaning: that of marking the student response as problematic or insufficient. Students

reflexively infer such turns to accomplish repair work, and bid for a response turn.

In the above example, the teacher does not keep her orientation towards the transparency during the evaluation, but shifts her gaze back towards the class. The students seem visibly to orient to the teacher's gaze shift up and around the class as a sign that the response is not sufficient. The teacher shifts her gaze from one side of the class to another during the evaluation, after which, during the silence (line 4), the students raise their hands. The students also seem to orient to the fact that the teacher has not reached out to reveal the answer from the transparency. To be able to reveal the answer by pulling down the cover sheet, the teacher would need to bend further closer to the overhead projector, as she is standing behind the table. In fact, as Hannu provides his response in line 3, the teacher bends closer to the overhead projector and places her right hand near the cover sheet. But as Hannu's response is not adequate, the teacher does not bend closer. Thus, a visible teacher body movement that is sequentially appropriate at this point is absent, and it appears that the students react to this as well as to the verbal acknowledgement in that they seek an opportunity to continue the response (see also the next example). What happens is that the teacher does not change her body position during the acknowledgement or the following turn-allocation–response sequence. Rather she keeps her body slightly bent towards the overhead projector and her right hand in position ready to pull the cover until Linda has provided the expected answer. This is a further indication that the teacher is looking for something more than what Hannu has provided.

While it seems that the students orient towards the teacher's evaluative practice as an indication of the inadequacy of Hannu's answer, it can also be the case that this in itself invokes their bids. Namely, Hannu's answer only provides one plausible example of behavioural problems when the teacher is requesting several (see the question format in line 1). In this light, it may also be the case that other students on hearing Hannu's answer find it lacking essential information that the teacher's question was seeking.

It is in these kinds of repair sequences that the reflexive relationship between pedagogy and the organization of repair is manifested (Seedhouse 2004). Although the student's answer is acceptable, it is not the exact response the teacher is looking for, and thus the response is marked as insufficient through multiple semiotic resources (i.e. the prosodic packaging of the acknowledgement, the gaze shift from the OHP to and around the class, the withholding of revealing the answer, and the not bending closer to the OHP to reveal the answer). The teacher's responsive action, even though it is not a repair initiator per se, is interpreted to be a dispreferred action in that it occasions additional responses from the students. In other words, it does not close off the activity segment as positive evaluations generally do (e.g. Mehan 1979; Leiwo et al. 1987a, b).

In both of the examples above, the teacher's action of delaying the revealing of the correct answer displays her orientation to the ongoing student response as inadequate or inappropriate, thereby projecting the dispreferred

nature of the forthcoming third turn action. In the latter case, the inadequate marking of the answer is further enhanced by the absence of a body movement that enables the revealing of the answer. In both cases, the teacher's gaze trajectory is also purposeful in the projection of the dispreferred next action. In example 32, the teacher's continued gaze orientation highlights the interactional relevance of the transparency, whereas in example 33, the teacher's gaze shift back to the class marks the students' response as problematic, thereby making relevant a new selection and turn-allocation activity.

The difference between the two examples lies in the contextual configuration of the activity frameworks, i.e. the nature of the correct answers and how the interaction is organized in terms of the kinds of answers requested and the revealing of the answers. That is to say, the third turn action in individual IRE sequences is constructed differently when the correct answer is just a word or a short phrase and when it is a longer expression or rephrasing of a bigger idea. In example 32, because the target item is visible on the transparency, it is possible for the teacher to just point out the error in the student's answer, and therefore produce a teacher-initiated teacher-correction. In example 33, as the teacher withholds the revealing of the answer for quite some time, it allows another kind of a repair trajectory: that of teacher-initiated peer-repair. Thus, the enactment of teacher third turn actions both in terms of their verbal and embodied design is locally dependent on the broader framework of the ongoing activity and its goals, and how it is organized through the different mediating artefacts. When the activity at hand has a different type of checking procedure and different types of answers are expected from the students, the projection of impending repair work from the teacher is accomplished differently. In addition to the practices already described, a slightly different sort of a realization will be exemplified next.

6.2.2 Cut-off body movement at TRP

An example of a slightly different embodied projection mechanism is depicted in extract 34. It comes form an EFL lesson in which the class is checking students' homework. The task was to name a number of household tools, pictures of which were provided on a handout. The checking is once again mediated through the use of a transparency, which is an exact copy of the handout. Thus, the expected answer from the students is a word: the name of the tool. Instead of having ready made answers on the transparency, the teacher writes the right names on it next to the pictures. In order to do that she needs to bend closer to the overhead projector. Each time the teacher writes the answer on the transparency, she straightens herself to a standing position behind her table, which could be said to be her 'home position' (Kendon 1980 as cited by Schegloff 1998: 542) during this activity. The straightening body movement is enacted for the purpose of allocating the response turn to the next speaker, i.e. to be able see who is bidding for a turn.

The extract displays how the teacher orients towards the forthcoming student response in that she positions her body with respect to the overhead

projector in such a way that it will be easy for her to write the right answer on the transparency (line 6). That is, the teacher bends closer to the overhead projector at the same time as Selja provides her response. The body movement towards the projector presages the teacher's forthcoming evaluative response through the writing. Moreover, it displays the teacher's expectation towards the student answer as the correct one.

(34) English_L2_Not actually pliers

```
1              (4.1) T WRITES AN ANSWER ON TP
                     SELJA GAZE DOWN AT HER BOOK

2       T      a::n these things over ↑here (0.4)
               {T GAZE TOWARDS TP
                          {T GAZE SHIFT TOWARDS HER TABLE/PAPER
                 {T POINTS W/ MARKER ON TP
               {SELJA GAZE DOWN AT HER BOOK

3              what are they called.
               {T GAZE TOWARDS TABLE, STRAIGHTENS HERSELF
                        {T GAZE SHIFT TOWARDS CLASS
               {SELJA GAZE DOWN AT HER BOOK

4              (1.9) T LOOKING AROUND AT CLASS
                     SELJA RAISES HER HAND, SHIFTS GAZE TOWARDS T

5       T      uhh Selja
               {T GAZE TOWARDS SELJA
               {SELJA GAZE TOWARDS T

6       Selja  pliers
               {SELJA GAZE TOWARDS T
               {T GAZE TOWARDS CLASS,
                BEGINS TO BEND BODY TOWARDS THE TP=

→       T      .HHH well those are not actually pliers .hhh
               ={T STRAIGHTENS BODY BACK, T GAZE TOWARDS TP
                           {T GAZE SHIFT TOWARDS CLASS
                              {T HAND GESTURE
                                        {T HAND PUSHING GESTURE

8              but the pliers are the other ones that look=
               {T GAZE TOWARDS CENTRE OF CLASS
               {T GESTURES
                             {SELJA ORIENTS TOWARDS HER BOOK

9              =almost like that.
               {T GAZE TOWARDS CLASS MORE LEFT SIDE, GESTURING
                          {T GLANCE TO RIGHT SIDE OF CLASS

10      (Hannu) (x[xx)      ]

11      T        [so: Virve]
                 {T GAZE TOWARDS LEFT SIDE OF CLASS

12      Virve  °pinsers°
               {T GAZE TOWARDS VIRVE
                 {T GAZE SHIFT TOWARDS TP=
                 {T BODY SHIFT TOWARDS OHP=

→       T      yeah these are called pinsers.
               ={T BENDS CLOSER TO TP, GAZE TOWARDS IT

14             (2.5) THERE IS TALK at the background
                     T WRITES THE ANSWER ON THE TP
```

The teacher allocates the response turn to Selja in line 5 by uttering her name and by gazing towards her. When Selja produces her response, the teacher concurrently shifts her gaze towards the transparency and begins to bend towards the overhead projector (line 6). The body movement the teacher performs is rather small and it is retracted immediately after Selja has given her response. The withdrawal of the body back into standing position projects that there is something in need of clarification in the response, i.e. that it is not the correct answer. This is further emphasized by the longish in-breath the teacher takes in tandem with the body movement. It is noteworthy that this all takes place before the teacher evaluates the response verbally (line 7), and hence, initiates repair. The body withdrawal and the in-breath could be seen as embodied projections of the emerging verbal repair initiator. The turn-initial *well* of the repair initiator additionally marks the teacher's turn as dispreferred (see Pomerantz 1984) alongside the negatively constructed TCU that follows it.

When the teacher begins to bend towards the overhead projector at the same time as Selja provides her answer, the teacher exhibits a particular type of 'body torque' (Schegloff 1998) in which her gaze is focused towards the speaker, but her body is leaning closer to the overhead projector. The particular body posture she momentarily performs "serv[es] to index its shifting alignments of involvement" (Schegloff 1998: 553) in the ongoing activity as her gaze orientation reveals her continued attentiveness towards receiving the response, while the body shift projects her orientation to the forthcoming evaluation and the expectation that the response is correct. However, when the student produces the one word answer, the teacher after only having begun to move towards the overhead projector stops and returns to her home position. The quick withdrawal of the bending body back into the home position indicates that a dispreferred turn-of-action is in process. Following Haddington (2006) and his interpretation of cut-off gaze as an embodied projection device, the teacher's body posture could be referred to as *cut-off body movement* as it is suddenly stopped and immediately withdrawn. The cut-off body movement delivered together with the loud in-breath could be interpreted similarly, as Carroll (2006: 244–270) has done in word searches for forward-oriented repair adumbrated by embodied displays by the speaker (i.e. gaze aversion from the recipient) and concurrent audible repair initiators (e.g. sound stretches).

The example also illustrates how at least one of the students orients to the teacher's turn-of-action and its construction as a repair initiator that invites participation from the other students.[46] Namely, the teacher allocates a response turn to another student immediately after she has completed her third turn action (line 11). This illustrates that the student has signalled to the teacher her willingness to be the next speaker already during the teacher's third turn action. In addition, the teacher's gaze trajectory from the centre of the class to the left

[46] There are only a few students in view of the camera and none of them shows any signs of bidding for a turn. Virve, who obviously does bid, is not in view of the camera.

side and onwards to the right side and back to the left display that she is looking for another respondent (lines 8–11). It is on the left side of the class that she finds Virve bidding for a turn. What happens is that the teacher allocates the response turn to her (line 11). When Virve has begun to produce her response, the teacher shifts both her gaze and her body towards the overhead projector (line 12). Notice how here the teacher waits until Virve has begun to produce the TCU, the correct answer, before she initiates the shift towards the overhead projector. As Virve's response is correct, the teacher, while accepting the answer, also bends closer to the overhead projector in order to write the answer on the transparency (line 13). Thus, the bending movement the teacher performs towards the transparency is carried to its completion and is accomplished in succession to the gaze and body shift during the turn-allocation.

By and large, the teacher third turn actions that mark student responses as correct in the ongoing activity are constructed so that the teacher continues to bend closer to the overhead projector once students have provided the answer. Thus by orienting towards the transparency the teacher displays nonverbally that the response is accepted (cf. Pehkonen 2008: 44–45). In the example above, the teacher's shift in the trajectory of the body motion visibly marks the first student response turn as different from the accepted ones. It is the change in the direction of the body movement that first manifests the emerging repair. Other elements in the teacher's verbal turn-construction further emphasize it (see section 6.4.2 for their analysis). The withdrawal of the body is enacted in this case during the turn-organizational transition space before the teacher produces her verbal TCU. The sequential location of the enactment for the body movement is most likely due to the fact that the student response is only a word that is produced quickly. Thus there is no time for the teacher to commence body withdrawal during the response as she did in the previous examples where she withholds the revealing of the correct answer towards the end of the student response.

6.2.3 Summary

All in all, the present chapter has dealt with teacher third turn actions in relation to how teachers through withholding the revealing of the right answer on a transparency or through a cut-off body movement make it clear that the student responses are inadequate or wrong, thus foreshadowing the dispreferred nature of the forthcoming next action and the repair work instantiated through it. The embodied and material projection has been shown to be carried out concurrently with the student response turn in activities where the response is a longer stretch of speech or during the TRP when the responses are short. That teachers orient towards the pedagogical artefacts in question through different embodied actions before or during the student response turn shows, first of all, that they anticipate the forthcoming evaluation, and secondly, that they expect to hear the target responses. When this does not happen, teachers adjust their anticipatory embodied actions, and through modifications

in their realization of these actions, such as withholding the revealing of the answer, they indicate that the interaction is not evolving as the teacher had anticipated. Teachers, in other words, mobilize embodied and material resources to manifest the practical teacher action of evaluating student answers, and interpret the answers as they are produced. The use of these embodied and material projections evidence the first possible sequential position in which teacher third turn actions can be indicated to be "in play" – the second position response turn of the IRE sequence – before any verbal TCUs are produced. In contrast to previous research that has shown how teacher evaluations characteristically occupy the third turn of the instructional interaction, the above examples demonstrate that sequentially the third turn action can take place in part or completely simultaneously with the second turn (see also Pehkonen 2008).

It has also been shown how students attend to these teacher actions alongside the teachers' verbal evaluations in interpreting how the interaction unfolds and what the next relevant action is insofar as their participation is concerned in the accomplishment of the repair. That is, they orient towards the forthcoming third turn action as something that can invite repair, and accordingly raise their hands to bid for a response turn to produce a teacher-initiated peer-completed repair.

In addition, I have also tried to demonstrate how in different activities the interactional organization diverges according to the kind of semiotic artefact used to mediate the activity. In other words, what kinds of actions teachers do need to carry out in order to display the correct answers? Do they reveal them or write them down? Teachers' embodied repertoires vary across different activities according to how the mediating artefacts figure in the emerging interaction as they are momentarily fashioned so as to acquire interactional relevance with respect to the participants' actions and action projections. When teachers utilize 'key' transparencies in which the answers for the exercises have already been written down, teachers' orientation to them during the student response underlines them as relevant and important domains of scrutiny, not only for students but also for the teachers themselves. This is because teachers can compare the student-produced answer to the correct one and because students can see the correct answer on the screen. Such objects are also particular in that they have an effect on the type of repair work undertaken by teachers. When the correct answers are visible on the transparency, there is no point for teachers to initiate repair. It is reasonable simply to perform an other-repair. In contrast, when teachers need to write the answers on transparencies, the interactional relevance of these artefacts becomes clear when teachers orient towards them. Likewise, they enable the accomplishment of different types of repair work in that teachers can initiate repair and call for peer-performed repair. As such the usage of embodied resources is inherently tied to the particular spatial and material configuration of each activity framework (cf. Mondada 2007). In the above examples, the shifts in the teachers' body and gaze movements are rendered salient and interactionally relevant vis-à-vis the activity setting and its affordances and limitations.

6.3 Silence and embodied orientations in lieu of or before third turn actions

Research on both everyday and classroom interaction has shown how silence in the TRP and beyond is employed by interactants to shape their emerging turns-of-action as dispreferred (Schegloff 2007; Pomerantz 1984; Macbeth 2000, 2004; Hellermann 2003; Margutti 2004; McHoul 1990). For everyday conversations, the unmarked, so called 'normal' turn-transitional space is one beat of silence: silences longer than that are marked and display the dispreferredness of next actions (Schegloff 2007: 67). In classroom interaction, silence in the sequential place the third turn characteristically occupies has been shown to be an interactional device to indicate dispreference (e.g. McHoul 1990; Macbeth 2000, 2004; Hellermann 2003; Margutti 2004; Lee 2008; Routarinne 2008). For instance, Hellermann (2003) has shown how students interpret the silence that occurs in the rhythmical slot of the teacher third turn to indicate that the preceding student response is somehow problematic and calls for repair. Such student interpretations reveal that the third turn is a conditionally relevant next action within the IRE sequence, and when it does not occur, the students orient to its absence as interactionally meaningful. Other researchers have also shed light on how teacher third turn actions are temporally delayed in production, thus creating a silence between the second turn and third turn actions that seemingly affects the sequential organization of the interaction (Margutti 2004; Macbeth 2000, 2004).

With respect to delayed teacher third turns, Macbeth (2004: 716) points out that "correctness" can be seen and heard in these temporal durations." He goes on to state that

> "[i]t[47] permits a way of hearing the adequacy of replies publicly and observationally, in the temporal parameters of the production of the teacher's third turn, where the production of public knowledge and understanding is perhaps the standing task and achievement of classroom instruction" (Macbeth 2004: 716).

The transition space between the second turn and the third turn actions is therefore a sequential position through which teachers can display that the student response is problematic vis-à-vis the target response, thereby projecting that repair actions are called for. The question, however, is whether it is the silence in itself that invokes the participants' interpretation of it as projecting dispreferred actions, or whether there is something else taking place, or not taking place, during the silence that serves to create its interactional relevance to the ongoing IRE sequence.

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47 The 'it' refers to the correctness of the student answers and how in delayed teacher third turns this correctness is projected to be missing (Macbeth 2000).

What I have observed in my data is that silence is employed to create differently designed teacher third turn actions, which in turn have an influence on what kind of a repair trajectory is enacted and how. First of all, silence accompanied by particular types of teacher embodied actions seems to be sufficient in functioning as a repair initiator in its own right. In such cases, the repair is accomplished by the students. In some cases, silence together with the teachers' embodied orientations delay the production of the third turn, which is then produced. Silence + the verbal TCU together function as a repair initiator, as the teacher third turn action. Such repair initiators are either followed by teacher-performed repair or by students' self- or peer-performed repair. A sub-section is devoted to each trajectory and to the description of the multisemiotic resources teachers employ in projecting their third turn actions as dispreferred.

6.3.1 Motionless embodied actions as teachers' repair initiators

In this section, silence in lieu of the teacher's verbal third turn action is viewed as a turn-of-action accomplishing the work of initiating repair. During such silences, teachers do not produce verbal third turn actions, but perform certain types of motionless embodied actions. There are two such instances in my data, and what happens is that the students seem to treat the silence, and also the teacher's embodied actions, as repair initiators in themselves and in response they produce peer-performed repair. What seems to happen then is that students become involved, or are solicited to participate, in the repair work due to the teacher's third turn silent action (cf. word searches and recipients' involvement in its resolution in, e.g. Goodwin & Goodwin 1986; Carroll 2006). The repair trajectory that occurs is thus teacher-initiated, although silent, peer-repair. I will discuss both of the instances below as they reveal slightly different issues related to the teachers' embodied actions during the silence. Interestingly, in both cases the students self-select themselves as next speakers.

Example 35 is from an EFL lesson from an activity where the class is checking the students' answers to a listening exercise the class has just done. The students' task was to identify the words receiving main stress in the discussion on the tape. The exercise is in the students' book, which functions as a mediator in the activity, and as such it has an effect on the organization of the interaction. As was shown in chapter 5, the participants' orientation can legitimately be directed towards the book, which in turn affects their gaze trajectories during the IRE sequence. The example demonstrates how students orient towards the absence of the teacher third turn verbal action by performing repair before the teacher produces her correction.[48]

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[48] The teacher's turn-allocation in line 3 is directed at a non-bidding, non-gazing student, who nevertheless provides an answer after a longish silence. The overall activity of listening to the text and checking the student answers took place towards the end of the lesson at hand. Because of the limited time that was left of the lesson, it appeared the teacher did not wait for student bids, but allocated some of the turns to non-bidding students. For this reason, the form of the teacher turn-allocations differs from those in section 5.2.3.

(35) English_L1_School

1		(1.8) T GAZE DOWN AT HER BOOK LINDA GLANCES UP FROM HER BOOK
2	T	an the follo↑wing (0.6) {T GAZE SHIFT TOWARDS CLASS {LINDA GAZE SHIFT DOWN AT HER BOOK
3		Linda {T GAZE SHIFT DOWN AT HER BOOK {LINDA GAZE DOWN AT HER BOOK
4		(0.9) T GAZE DOWN AT HER BOOK LINDA GAZE DOWN AT HER BOOK
5	Linda	↓sa:m:e {LINDA GAZE DOWN AT HER BOOK {T GAZE DOWN AT HER BOOK
→		(1.9) **T GAZE DOWN AT HER BOOK** LINDA GAZE DOWN AT HER BOOK AT 1.3 SHIFTS GAZE UP
7	Linda	[(xx) {LINDA GAZE TOWARDS T
8	Jari	[no. s[ch<u>oo</u>l.=
9	T	[sh- {T GAZE DOWN AT HER BOOK
10	Linda	[(x)] {LINDA GAZE TOWARDS T
→	T	**[=SCH<u>OO</u>L.] (.) school was hurt.** {T GAZE SHIFT TOWARDS JARI {T HEAD NOD UPWARDS {T GAZE SHIFT DOWN AT HER BOOK {LINDA GAZE SHIFT DOWN AT HER BOOK, ERASER IN HER HAND
12		(0.8) LINDA ERASES HER ANSWER T GAZE DOWN AT HER BOOK

At the beginning of the example, we can see how the teacher initiates an instructional sequence in line 2 and shifts her gaze towards the class to select the next speaker. In line 3, she allocates the next turn to Linda while simultaneously shifting her gaze down towards her book. (Linda is at this point gazing down at her book.) The teacher is sitting behind her table and the book is on the table in front of her. The gaze shift down towards the book once again is enacted in anticipation of the forthcoming comparison of the student answer to the expected one. Linda responds in line 5, gaze directed down towards her book. Linda's response is followed by a rather long silence (line 6) during which the teacher continues to steadfastly gaze down at her book. Linda, in contrast, raises her gaze towards the teacher when 1.3 seconds have passed of the teacher's incipient third turn action space. Her gaze shift towards the teacher appears to be a reaction towards the missing teacher evaluation. When her gaze reaches the teacher, she is faced with a non-gazing recipient as the teacher is still looking down at her book. Inspection of the video suggests that Linda then

begins to say something as her mouth is clearly moving. However, her voice is completely drowned by the overlapping turns of Jari and the teacher (lines 8–9 and 11).

Not only is Linda reacting to the missing third turn verbal evaluation, but Jari is also orienting to its absence. His reaction, however, is different from Linda's gaze shift in that he first rejects Linda's answer and then produces a candidate answer through a peer-repair (line 8). In overlap with his turn, the teacher begins to correct Linda's response, but she cuts it off before actually getting anywhere (line 9). At this point, the teacher is still gazing down at her book (line 9), and thus she is not able to see the students' orientations towards her and the absence of her actions. When Jari has completed his repair turn, the teacher immediately shifts her gaze towards him and repeats the correct answer (line 11). Notice how the teacher utters the correct answer in a notably louder volume and emphasizes it. The teacher continues by repeating the phrase in which the correct answer appeared on the tape. The teacher's turn thus both confirms Jari's response and corrects Linda's wrong response. That the teacher confirms Jari's response is highlighted by the fact that she briefly glances towards him during the short repetition of the correct answer (*SCHOOL*) and that she nods her head while gazing towards him. In a way, she also displays her approval of Jari's self-selection by acknowledging his answer, and therefore ratifying his participation (also Sahlström 1999: 112–117; Lehtimaja 2007). After she has done this, she orients towards her book again.

Example 35 thus demonstrates how there is sequentially an expectation for a teacher evaluation to take place after the student response, and particularly how an absence of its verbal realization is interpreted by students as a sign of trouble. The long silence, and the teacher's continued gaze orientation, invites reactions from the students and opens the conversational floor to multiple participants in terms of speaker change. Margutti (2004: 416–417) points out that

> "the practice of producing delayed TTR [third-turn receipt] in the form of repair initiators in the classroom produces a range of sequential consequences which involve not only the actual producer of the problematic answer as recipient, but also the other pupils in the audience. The absence of an immediate TTR and the teacher's repair initiators *calls for the other pupils either to initiate or to do repair on the wrong answer*" (emphasis in the original).

In general, it has been noted that the producers of first-pair parts can pre-emptively modify or reverse the preference expectation of their prior turn into another direction during the gap between adjacency pairs when a dispreferred response is projected to be initiated by the recipient as the second-pair part (Schegloff 2007: 70–71). Yet here the gap comes to be more than a gap: it is a rather extended silence, during which the primary recipient of the response, the teacher, continues to gaze down at her book. Because the silence extends a lot further than a normal transition place gap between turns and even further than an extended transition place gap, it could be argued that the extended silence can be considered as inhabiting the teacher's third turn action space, and hence

as a teacher repair initiator. In other words, although there is no verbal TCU from the teacher, the long silence can function as a dispreferred turn-of-action in itself. This is also plausible in view that the silence, together with the teacher's motionless behaviour, is enough to occasion repair work from the students. The students orient towards the silence as an indication of trouble, as a dispreferred action in the making, and try to correct the answer before there is an audible reaction from the teacher.

The students' reactions to the silence, however, differ in the above example. Whereas Linda shifts her gaze towards the teacher and begins to say something (most likely she initiates repair in order to self-correct, but that is difficult to prove), Jari offers a candidate alternative through peer-repair. Their reactions are partly due to their established participant roles, Linda being the primary recipient of the teacher evaluation while Jari is a ratified listener. Nevertheless, Jari claims the next turn for himself by performing the repair, thus establishing himself as the current speaker. In repair trajectories such peer-performed correction is not a characteristic phenomenon in classroom interaction. Prior research has shown other-initiated self-completed corrections to be the preferred organizational repair mechanism, in which the teacher initiates the repair and the nominated student completes it (e.g. McHoul 1990; Seedhouse 2004: 145–146; although cf. Jung 1999). In general, in my data, however, there are more teacher-initiated peer-repairs than teacher-initiated self-repairs.

In the previous example, it appears that the students predominantly react to the long silence as a sign of a dispreferred turn-of-action by the teacher. Although Linda directs her gaze towards the teacher, and is faced with a non-gazing participant, it is difficult to say if the non-gazing status of the teacher is the reason why she, or Jari for that matter, produces the next turn. In the following example, silence and the teacher's explicitly motionless body posture seem to occasion the student repairs.

Example 36, which is from a biology lesson, takes place during a plenary talk, during which the teacher asks the students questions related to the topic he has been talking about. Here the students need to identify what coloured eyes persons with different types of gene combinations will have. The teacher has written the combinations on the blackboard and during the activity segment he is standing in front of it. In general, when the teacher has evaluated the student responses positively, he has turned to the blackboard and has begun to write the correct answers on it, partially in overlap with the student responses (see also Pehkonen 2008). In other words, he has not necessarily expressed verbally his positive evaluation of the student answers. In this way, the blackboard serves as a mediator in the interaction and constitutes an essential domain of scrutiny for the students to come to an understanding of whether their answers are right or wrong. The example demonstrates how a silence follows a student's wrong response and how the teacher delays beginning to write the answer on the blackboard until a proper answer is produced. It also shows how the character of the student response, which in

this case is humorous, has a role in how the other students orient to the emerging interaction and the repair sequence they embark on.

The example begins with a situation where the teacher is facing the blackboard writing the previous answer on it. In line 2, the teacher initiates a new instructional sequence by inviting the students' responses concerning person with a Bb-gene combination (*him* in the teacher's turn refers to the gene combination). Simultaneously, he turns his body and gaze towards the class so that he is standing with his back towards the blackboard. He also points towards the blackboard at the particular gene combination for which he is seeking an answer. The teacher is thus performing a particular configuration of 'body torque' (Schegloff 1998), through which he reveals his orientation to parallel actions. The teacher's gaze and body posture are turned towards the class in the service of selecting and allocating a turn to the next speaker, while his right hand foregrounds the target item on the blackboard and its relevance for the forthcoming response and evaluation actions. The initiation is followed by a silence during which several students raise their hands (line 3).

(36) Biology_Black

1		(4.5) T WRITES ON THE BL
2	T	okay. (0.3) what about him {T TAKES A STEP AWAY FROM BL, GAZE TOWARDS BL {T TURNS BODY SLIGHTLY TOWARDS CLASS {T POINTS AT BL W/ RH {T GAZE SHIFT TOWARDS CLASS
3		(1.8) T LOOKING AT CLASS STILL POINTING AT BL LH LEANS AGAINST THE WALL AAPO RAISES HIS HAND KAIJA RAISES HER HAND ALL STUDENTS, EXCEPT SANNA, GAZE TOWARDS THE BL
4	T	[Aapo] {T GAZE TOWARDS CLASS, STILL POINTING AT BL
5	Rowan	[brown.] {ROWAN GAZE TOWARDS T, HANDS CUPPED IN FRONT OF MOUTH
6	Aapo	BLACKHH {AAPO SHIFTS GAZE DOWN AT HIS DESK {AAPO LOWERS RAISED HAND
→		**(1.6) T LOOKING AT CLASS** **STILL POINTING AT BL** ALL STUDENTS GAZE TOWARDS THE BL EXCEPT AAPO & SANNA
8	Rauli	[green] {RAULI GAZE TOWARDS THE BL
9	Reija	[(brown)] {REIJA GAZE TOWARDS THE BL
10	Aino	[BROWN] IS BLUE. {AINO GAZE TOWARDS THE BL

11	Rauli	<green> {RAULI SHIFTS GAZE AND HEAD TOWARDS AINO
		OUTI HAND RAISE, GAZE TOWARDS T
12	Rowan	[<↓bro↑w:n>] {ROWAN GAZE TOWARDS THE BL
13	(Pauli)	[(blue) left]
14	Outi	brow[n {OUTI GAZE TOWARDS THE BL
15	Pauli	[ehheh[heh= {PAULI GAZE TOWARDS THE BL
→	T	**[=↓brown.** **{T NODS TOWARDS OUTI** {T GAZE TOWARDS OUTI
17	Aapo	(xx[x]] {T TURNS TOWARDS THE BL
18	Rowan	[(xx)]
19	Pauli	BROWN.
20	Kaija	°(blond) [(x)°] {T WRITES ON THE BL
21	Aapo	[shh]
22		(1.4) T WRITES ON THE BL

In line 4, the teacher nominates Aapo as the respondent by uttering his name and by gazing towards him. At the same time, however, Rowan is offering a candidate answer, which the teacher ignores (line 5). Aapo produces his response in line 6, but it is not correct. Notice how he designs the answer as humorous: it is biologically very unlikely that a person will have black eyes. The teacher's reaction is two-fold. First of all, he continues to gaze towards Aapo without saying a word; hence a lengthy silence follows Aapo's turn (line 7). Secondly, he keeps his position steady without any attempt to orient towards the blackboard, and hence to the writing of the answer on it. He is completely still. The teacher's orientation to the blackboard would indicate that the answer is accepted.

What happens is that several students offer their candidate answers both in overlap (lines 8–10) and successively across several turns (lines 11–12, 14). It is notable how Rauli continues the path Aapo has laid and produces an unlikely answer (line 8, she repeats it in line 11) as the possible gene combinations in the exercise could only produce either blue- or brown-eyed people. Reija provides the correct answer in line 9. Aino's answer is somewhat problematic as she mentions two colours (line 10). Rowan produces the right answer (line 12) as does Outi in line 14. It is not until several students have produced their candidate answers that the teacher displays his evaluation of them. The evaluation is constructed through multiple semiotic resources: the teacher first nods and gazes mainly towards Outi, and then he repeats the correct answer (line 16). It is as if the teacher reacts with his positive evaluation to Outi's correct response in line 14, thus singling her answer out from the other

candidate answers.[49] Once he has done this, the teacher turns his body towards the blackboard and orients towards writing the correct answer on it. That the teacher orients to the blackboard at this point to write the answer is also a form of withholding the writing of the correct answer (cf. withholding the revealing of the right answer).

It is noticeable that Aapo, who is the selected respondent, does not try to repair his own answer. More importantly, Aapo does not pay attention to how the teacher reacts to his answer. Instead Aapo shifts his gaze down towards his hands during his turn (line 6). During the silence, he continues to gaze at his hands, but towards the end of it he shifts his gaze up towards the class, and looks around (line 7). The gaze shift towards the class could indicate that he also orients to the absence of an audible reaction from the teacher, all the more so as there is no reproach or other reprimand initiated by the teacher given that Aapo has produced a response that is deliberately wrong. However, the silence in itself could be seen as a reproach to which Aapo reacts with his gaze shift. The repair is then performed by his peers who initially are only ratified listeners. They seem to react to the teacher's body posture and the continued gaze towards the class: that is, they respond to the silence and its duration alongside the teacher's motionless behaviour (line 7). This behaviour by the teacher could be described as 'doing being still' (Carroll 2006) in that he is deliberately withholding the performance of embodied actions, thereby rendering his stillness an interactionally relevant resource for the students to interpret as an indication of trouble, thereby projecting repair.

It is very interesting that the students produce their repairs almost simultaneously. This could indicate that there is a defined duration within which the students deem it appropriate for the teacher to construct the third turn action through talk. If there are no signs from teachers that they are to produce any verbal third turn actions, students are allowed to react by self-selection (also Margutti 2004). A similar observation has been made by McHoul (1978) in relation to student second-turn production after the teacher has selected and nominated the next speaker. According to him, if no student turn is produced within a certain time after the teacher's initiation, the teacher issues a prompt in order to get the selected student to respond (McHoul 1978: 195). In both of the above examples, the silence is quite long. In all the other instances in my data where there is silence between the second turn and third turn actions, the silence appears to be shorter than in the examples above, and in such instances the teachers are the next speakers initiating or performing repair. Whether the length of the silence plays an effective role in other similar situations is difficult to tell on the basis of the two instances presented here.

In addition, as in example 35, the students here are rendered the possibility to self-select themselves as next speakers, since the teacher has not verbally established himself as the next speaker. In addition to Margutti (2004),

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[49] Outi is also the only student who raised her hand to bid for a turn in order to provide peer-repair, but instead of waiting to be selected, she lowers her hand and self-selects herself in a similar manner to the other students.

Lehtimaja (2007) has observed that students are allowed to self-select themselves as next speakers and offer their answers when teachers have established that a student response is in need of adjustment. The response is then co-constructed by the teacher and the students. A possible problem that the opportunity for self-selection occasions here is that several students perform it at the same time, and the result is overlap in turns and a slight measure of confusion. Instead of reproaching the students, the teacher here evaluates the student contributions by accepting the correct answer and by not ratifying the incorrect answers, whether they are wrong by design or not (see also Sahlström 1999).

To briefly summarize this section, I have tried to demonstrate how a longish silence in the sequential position of a teacher third turn action space is interpreted by the students as not only projecting, but also accomplishing a dispreferred turn-of-action on the teacher's part. In addition to silence, the teachers' gaze orientation towards a pedagogical artefact or the class and motionless body posture appear to be meaningful for the students' understanding of the interactional relevance of the silence. As such, I suggest that the silence in conjunction with embodied orientations function as a visible repair initiator invoking repair from students. By constructing a long silence in the teacher third turn action space, a participation framework is established in which students are afforded the possibility to self-select themselves as next speakers by way of doing repair. In terms of projecting repair work and its resolution, silence clearly enables the participants to jointly negotiate and to collaboratively shape how the interaction evolves so that a verbal repair initiator does not have to be performed by the teacher. That is, the projected dispreferred turn-of-action does not necessarily have to take place through talk in order for the activity segment to move towards closure successfully. The participants' embodied actions are accorded the meaningfulness of talk in the sequential position of the third turn action space.

6.3.2 Divergent embodied trajectories in teacher-performed repair

Occasionally, silence seems to take on the role of delaying the beginning of the teacher third turn verbal TCU instead of occupying the whole third turn action space (see Schegloff 1996). When such sequences occur, teachers either perform repair or initiate repair through the third turn. The TRP, the silence and the teacher's verbal TCU together make up the third turn action space. Such silences are visibly oriented to by the students as projecting trouble with the student answers. The teachers' embodied actions and orientations to the pedagogical artefacts are also significant in accomplishing this. However, in different, locally situated sequences the embodied actions take divergent trajectories. What kinds of actions are performed will be explored through two examples, in both of which the teacher corrects the student responses. Teacher repair initiators are dealt with in the next section.

Both the teacher-initiated teacher-repair examples come from the same lesson, an EFL lesson. The activity depicted is once again the checking of a

listening exercise in which the students were to identify the words with main stress. The first example is in fact a continuation of example 9 in section 5.2.2 in which the teacher tried to get a response from a non-bidding student but did not succeed. In the present example, she finds another student to provide the response; this too involves a non-bidding, non-gazing student. The teacher allocates the turn to Kalle in line 3 by gazing towards him. Directly after, she shifts her gaze down at her book in anticipation of the response (line 4).

(37) English_L1_Not oli oikein

1	T	°joo-o° {T GAZE DOWN AT HER BOOK {KALLE GAZE AT HIS BOOK
2		(0.5) T GAZE SHIFT TO CENTRE OF CLASS KALLE GAZE AT HIS BOOK THERE IS TALK at the background
3	T	Kalle {T GAZE TOWARDS KALLE {KALLE GAZE AT HIS BOOK
4	(Jari)	(xx) {T GAZE SHIFT DOWN AT HER BOOK
5	Kalle	uhh (1.6) (married) {KALLE GAZE AT HIS BOOK {KALLE GAZE SHIFT TO T {T GAZE SHIFT TO KALLE
→		(0.8) **T GAZE TOWARDS KALLE** **AT 0.4 SECONDS GAZE SHIFT DOWN TOWARDS HER BOOK** KALLE GAZE TOWARDS T **AT 0.5 SECONDS BEGINS TO BITE HIS LIP**
→	T	**not oli #oikein#.** **{T GAZE DOWN AT HER BOOK** {KALLE GAZE TOWARDS T, BITES HIS LIP {KALLE STOPS BITING LIP, SHIFTS GAZE DOWN
8		(1.8) T LOOKING DOWN AT HER BOOK LINDA GLANCES TOWARDS T MOST STUDENTS GAZE DOWN AT THEIR BOOKS

After the teacher has allocated the turn to Kalle, we can see that he takes his time to respond. Kalle's turn is constructed so that it includes the discourse marker 'uhh' and a long silence during which he gazes down at his book; he is most likely doing some kind of cognitive work towards the goal of being able to produce the answer (line 5). After the silence, he delivers his candidate answer, simultaneously shifting his gaze towards the teacher. It appears that he does this to seek confirmation for his response from the teacher, as the turn design indicates uncertainty on his part towards the correctness of the response. When Kalle produces his turn-of-action, the teacher directs her gaze back towards Kalle after he has produced the discourse marker. The delay in the initiation of the response seems to draw the teacher's attention to him. The teacher continues to gazing Kalle's direction until he produces the response.

What happens next is that a silence emerges (line 6) during which the two gaze towards each other, and most likely establish mutual gaze. Next the

teacher shifts her gaze back down towards her book. It seems that Kalle reacts to the gaze shift instantly by beginning to bite his lip, thereby revealing his interpretation of the teacher's gaze shift and the silence as indications of trouble. The teacher's gaze shift after their mutual gaze in the sequential position of the third turn action is treated by the student as consequential vis-à-vis the correctness of his response. In the following moment the teacher performs an other-correction (line 7).

It is noteworthy that the student candidate answer in this sequence is already the second effort at the same target item, and therefore the teacher performs the repair as an alternative to initiating repair and seeking yet another student's suggestion. For instance, McHoul (1990: 365) concludes that other-corrections are used by teachers when students have been given a chance to self-correct their response but this has failed to provide any results. This particular example illuminates that teachers also perform repair in cases when peer-performed repair has not produced the correct response.

The next example illustrates a slightly different gaze pattern from the different participants during the silence. Unfortunately Lev, the nominated student, is not in view of the camera here so it is difficult to say what he is doing during the sequence and whether he is bidding for a turn or not.

(38) English_L1_Mine

1	T	is yes, {T GAZE DOWN AT HER BOOK
2		and (0.9) {T GAZE SHIFT TOWARDS LEFT SIDE OF CLASS {T GAZE SHIFT DOWN AT HER BOOK
3		Lev. {T GAZE DOWN AT HER BOOK
4	Lev	mine. {T GAZE DOWN AT HER BOOK
→		(0.9) **T GAZE DOWN AT HER BOOK** MOST STUDENTS GAZE DOWN AT BOOKS TUOMAS SHIFTS GAZE TOWARDS T AT 0.3
→	T	**<I sold mine.>** **{T GAZE SHIFT TO CLASS** {TUOMAS GAZE SHIFT DOWN
7		I think there were two words. {T GAZE SHIFT TOWARDS LEV

The example begins in line 1 with repetition by the teacher of the previous correct answer and a positive evaluation. In line 2, she issues an initiation in the form of an 'and' and by looking towards the left side of the class. This is where Lev is sitting, and apparently, the teacher selects him as the next speaker at this point, as in the next instant she shifts her gaze down and only then allocates the turn to him.[50] Lev produces his one-word response in line 4 without hesitation.

[50] The teacher's gaze shift towards the book before the turn-allocation once again illustrates several things. The teacher makes herself available as a recipient for the forthcoming response turn; she also visibly orients towards the forthcoming evaluation she is to perform after the response by orienting towards the book in

However, a silence emerges during which the teacher continues to gaze down at her book, not moving (line 5). In line 6, the teacher performs an other-correction, repeating the whole sentence the class heard on the tape. In addition, she specifies in line 7 that two words were emphasized.

During the silence in line 5, most students gaze down at their books, but Tuomas at 0.3 seconds into the silence directs his gaze towards the teacher. It is difficult to be sure whether he does this in reaction to the developing silence or to the fact that he knows that Lev's answer is not complete. Nevertheless, he orients towards the teacher during the silence as if expecting a reaction from her. This becomes clear from inspection of the sequential place in which he shifts his gaze back to his book: after the teacher has produced the other-correction. His gaze trajectory could be interpreted to mean so that he is treating the emerging silence and the teacher's gaze orientation to her book as projecting trouble with Lev's answer, thereby signalling that repair work will be forthcoming.

In both examples, the teacher's gaze trajectory during the silence is shaped by the design of the student answers; that is, by the way the preceding interaction has been constructed by both teacher and student. In example 37, direction of the teacher's gaze towards Kalle, and her following gaze shift downwards are a result of the way Kalle constructs his turn-of-action, while in example 38, the teacher continues to gaze down at her book when Lev, once he has been allocated the response turn, produces his response without hesitation. Regardless of the diverging gaze patterns, they seem to figure in the interactional meaning of the silence as projecting a dispreferred next action from the teacher, as the students produce visible reactions in response to them. In example 37, Kalle begins to bite his lip, and in example 38, Tuomas, a ratified participant, orients towards the teacher clearly expecting some kind of a response from the teacher to Lev's answer. Additionally, the third turn action that is created through the silence and the following other-correction serve to construct different participation opportunities for the students in that they are not expected to partake in the repair work the teacher initiates and accomplishes. In the former example, this is most likely to do with the fact that Kalle is already the second respondent and as he has not been able to produce the correct answer, the teacher delivers it herself. In the latter, it most likely relates to the fact that Lev's answer is partially correct: it is only lacking the second item.

When compared to the previous section, in the above examples the silence that emerges into the teacher's incipient third turn action space is not very long. In both cases, it is less than a second, and it is instantly followed by a teacher-repair. Both the silence in conjunction with the teacher's embodied orientations and the verbal TCU can be seen to make up the teacher third turn action, as it accomplishes the repair and simultaneously closes the particular activity segment. More importantly, these repair initiators are designed to fit the current

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order to compare the student answer to the expected one; and she also appears to treat the turn-allocation unproblematic, i.e. she assumes that the student produces the response.

activity framework, and the spatial and material configuration it affords. The correct answers in these examples are in the book, and therefore, the teacher does not have to reveal them or write them down for students to see. Consequently, she only needs to repeat the right answer in the third turn position after having positively evaluated the student responses (see also Margutti 2004: 400–401). The repetition is a way to make sure that all the participants have heard the student response, and thus have got the right answer.

6.3.3 Embodied actions prefacing teacher-initiated repair

In this section the focus is on teacher third turn action spaces that include a silence followed by a teacher's explicit, verbal repair initiator, delayed in its production (cf. Schegloff 1996). It will be shown that the silence once again projects a dispreferred next action together with the teacher's embodied orientations either towards pedagogical artefacts or towards the nominated speakers. Because the teacher explicitly initiates the repair, the repair trajectory differs from the previous ones in that it will be followed either by a student's self-repair or peer-repair. Occasionally, teachers do not find other candidate next speakers after several repair initiators, in which case they provide the solution. Below I will present two examples, each exemplifying teachers' different embodied orientations that are inherently tied to the contingencies of the current activity framework.

The first example comes from a whole-class activity in which the class is going through a list of Finnish words that the students had to identify in a text in English. The teacher is standing next to the overhead projector and she is also holding her book in her left hand. The right answers are written on a transparency. After each correct answer, the teacher evaluates the answer positively and immediately pulls down the cover sheet that hides the right answer.[51] Macbeth (2004) has observed such evaluations to be strongly positive. In example 39, the teacher does not provide a positive evaluation nor does she orient towards revealing the answer from the transparency. Rather she holds her gaze steadily down at the transparency during which a silence emerges. The teacher's continued gaze orientation towards the transparency and the emerging silence indicate that the student response is not the expected answer.

(39) English_L2-3_Oh right

1	T	uh kiel↑tää, {T GAZE DOWN TOWARDS TP
2		julistaa kielletyksi. {T GAZE SHIFT TOWARDS CLASS {EEVA HAND RAISE, GAZE TOWARDS T

[51] Here, yet again is one more variation in the teacher evaluative practices in terms of at which sequential point teachers accomplish the revealing of the answer – i.e. realize the positive evaluation through embodied means.

3		(1.9) T LOOKING AROUND AT CLASS LEEVI RAISES HIS HAND, GAZE TOWARDS T
4	T	uh Eeva {T GAZE TOWARDS EEVA {EEVA GAZE TOWARDS T
5	Eeva	forbid {EEVA GAZE TOWARDS T {T GAZE SHIFT DOWN TOWARDS TP
→		(1.0) **T GAZE DOWN AT TP** EEVA GAZE TOWARDS T
→	T	oh right, if you: (0.8) forbid some↑one {T GAZE DOWN TOWARDS TP
8		(4.0) T LOOKING DOWN AT TP
9	T	right (0.5) that's exactly (0.8) the word yo- (0.4) you would ↑use {T GAZE SHIFT TOWARDS CLASS, DIFFERENT PARTS {T NODS {EEVA GAZE SHIFT DOWN TOWARDS HER BOOK
10		but in this context (0.7) {T GAZE SHIFT DOWN TOWARDS THE TP
11		uh (1.0) some sort of behaviour (0.2) was not allowed <any longer.>= {T GAZE SHIFT AT CLASS
12	T	=Ulla {T GAZE SHIFT TOWARDS ULLA
13	Ulla	banned= {T GAZE SHIFT DOWN TOWARDS TP
→	T	=↓**hmm=** **{T GAZE DOWN AT TP**
→		(1.6) **=T REVEALS THE RIGHT ANSWER, GAZE DOWN AT TP**
16	T	°to ban° {T LOOKING DOWN AT TP

In line 4, the teacher allocates the response turn to Eeva. As she utters Eeva's name, the teacher's gaze is towards Eeva. When Eeva provides her one-word answer (line 5), the teacher simultaneously shifts her gaze down towards the transparency. The gaze shift projects the teacher's orientation to the forthcoming evaluation and the act of revealing the answer. Instead of producing the evaluation, however, the teacher continues to gaze down towards the transparency without showing any signs of moving the cover sheet. That is, a lengthy silence follows Eeva's response (line 6), during which Eeva gazes towards the teacher. That Eeva's gaze is directed towards the teacher reveals that she is waiting for the teacher to react to her response; i.e. to reveal the answer and to evaluate. Both the silence and the teacher's continued orientation towards the transparency mark the forthcoming teacher action as dispreferred. In line 7, the teacher acknowledges Eeva's response and provides a semantic clarification of the word Eeva has provided. In turn-initial position the *oh right* displays that the student response was unexpected. The teacher's turn-construction displays to the class that she is processing Eeva's response – doing some sort of cognitive work – in the course of providing the clarification.

It is noteworthy that the teacher's acknowledgement is ensued by another motionless silence (line 8), during which the teacher still does not raise her gaze towards the class, and which also lasts longer than the previous one. Most of the students, among them Eeva, gaze towards the screen: they are waiting for the teacher to continue. After the silence, the teacher acknowledges Eeva's response once again in line 9. As she does this, she shifts her gaze towards the class and looks around. The evaluation is followed by a repair initiator that provides more information about the nature of the word the teacher is looking for (lines 10–11). It takes the form of cluing (McHoul 1990) and helps guide students in their search for a correct response.[52] It also displays to the students that while the verb Eeva provided is not entirely incorrect in its semantic meaning relative to the Finnish word, it is not the expected one. Directly after the repair initiator, the teacher allocates a response turn to Ulla (line 12). Ulla's response is correct (line 13), and the teacher accepts the answer (line 14). The acceptance is immediately followed by the action of revealing the correct answer. The teacher also reformulates the answer in line 16 by uttering the proper verb in its infinitive form. Unfortunately, Ulla is not in view of the camera, and therefore it is difficult to say where she directs her gaze during the sequence and at which point she raises her hand.

When the teacher continues the evaluation and scans the class (line 9), it becomes apparent that someone, Ulla, is bidding for a turn, as the teacher is able to nominate the next speaker immediately she has completed her cluing (lines 11–12). What happens is that the teacher shifts her gaze down towards the transparency during Ulla's turn (line 13), then acknowledges her response with a use of a minimal acknowledgement token (↓*hmm*). In latching onto the response (line 15), the teacher pulls down the cover sheet that hides the correct answer, thus revealing it to the students. The extended sequence thus displays how the interaction is characteristically organized when the instructional sequence is successful in that the student response matches the pedagogical focus of the activity. In contrast, the instructional sequence from line 1 to line 11 illustrates how the teacher builds her dispreferred third turn action through the use of silence and the delay in revealing the proper answer as well as her continued gaze orientation towards the transparency. She only shifts her gaze towards the class in order to allocate another response turn to another student. There are therefore, in comparison to the latter part of the sequence, fewer embodied actions from the teacher when she shapes her incipient third turn action as projecting repair work and invoking further student candidate answers.[53]

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52 McHoul (1990) considers teacher evaluations that are constructed in the form of cluing as repair initiators, which is how I view them as well.

53 Example 18 in section 5.3.1 is from the same activity. The example contains two repair initiators that manifest slightly different types of embodied orientations from the same teacher, although the first of these is not preceded by a silence. Rather it is preceded by a slow head nod, after which the teacher acknowledges the student response.

Looking at it differently, the teacher's actions in lines 7–11 could be seen as a means to modulate or to soften the evaluation as well as to give time for the students to produce an alternative verb. The teacher's continued orientation towards the transparency also displays to the students that her attention is directed towards the transparency, and that she is not therefore available for further interaction at the moment. Although at this point the students could offer their candidate alternatives through self-selection, as in examples 35 and 36, none of them do so.[54] Rather, they wait until the teacher shifts her gaze towards the class, hence signalling to them her availability to continue the interaction and projecting the actual initiation of the repair sequence.

Example 40, in contrast, demonstrates how the teacher structures his third turn action first through a long silence, during which he becomes completely motionless gazing towards the class, after which he initiates repair. The extract comes from a biology lesson from an activity in which the teacher is lecturing about heredity and genes. He has drawn different gene combinations on the blackboard and while explaining about genetic properties, he asks related questions of the students. In lines 1–4, the teacher initiates the sequence by formulating the initiation as a yes/no-question. In line 6, he nominates Aapo as the respondent by gazing towards where he is seated.

(40) Biology_How is it possible

1	T	uhh (0.8) ↓what about the hair (.) {T GAZE TOWARDS CLASS, STANDING IN FORNT OF BL, BODY TURNED TOWARDS BL {T POI}NTS W/ RH TOWARDS BL
2		of every children, they could have. (1.5) {T STANDING GAZING TOWARDS CLASS
3		could these people have the (0.5) have (two) children with {T STANDING GAZING TOWARDS CLASS {T POINTS QUICKLY TOWARDS BL {T TAKES STEPS FORWARD {T PREPARES TO LEAN AGAINTS THE WALL, GLANCES TOWARDS THE CLOCK ON THE WALL
4		(0.3) with straight hair. {T GAZE TOWARDS CLASS, LEANING AGAINST THE WALL
5		(0.9) T LEANING AGAINST A WALL WITH LEFT SHOULDER, GAZE TOWARDS CLASS AAPO STRAIGHTENS HIS BODY, SHIFTS GAZE UP FROM BOOK AND RAISES HIS HAND
6	T	Aapo {T GAZE TOWARDS CLASS {AAPO GAZE TOWARDS T
7	Aapo	YES:. {AAPO LOWERS HAND, SHIFTS GAZE DOWN {T GAZE TOWARDS CLASS

[54] At least none of the students who are in view of the student camera view raise their hands or say anything.

→ **(1.2) T LOOKING AT CLASS**
LEANING AGAINST THE WALL
AAPO LEANS ON THE DESK AND
BLOWS A PAPER
KAIJA GAZE TOWARDS T
SOME STUDENTS GAZE DOWN AT
THEIR BOOKS
OTHERS GAZE TOWARDS T

9 Pauli what?=
{PAULI GAZE TOWARDS T

10 Kaija =KAIJA SHAKES HER HEAD, GAZE TOWARDS T

→ T **how is it possible.**
{T GAZE TOWARDS CLASS, LEANING AGAINST THE WALL
{AAPO BLOWING A PAPER, LEANING ON THE DESK

12 Aapo I don't know cos (0.8) god works in mysterious ways.
{AAPO STRAIGHTENS HIMSELF, SHIFTS GAZE TOWARDS T
{AAPO GAZE SHIFT DOWN

13 T ((laughs)) •that was a good an- answer• .hh(h)
{T LOOKS DOWN AND LEAVES THE WALL
{T TAKES STEPS CLOSER TO THE STUDENT DESKS
{AINO RAISES HER HAND

14 T of course=Aino
{T PICKS UP PAPERS FROM THE FIRST DESK GAZE DIRECTED UP
{T GAZE TOWARDS AINO, TAKING STEPS BACK

15 Aino I don't think they could because the- they on-

16 if they had- if there was two small w genes

17 then they could, but now that there's only ↑one

18 in each pair, (.) there's a big w which is dominant.

19 an [so °they (x]x)°

20 T [okay]

In line 7, Aapo delivers his answer in a loud voice simultaneously shifting his gaze down towards his desk and lowering his raised hand. It appears that he shapes his response purposefully as wrong. What follows is a rather long silence during which the teacher becomes completely motionless: he continues to gaze towards Aapo and to lean against the wall (line 8). It is difficult to say whether Pauli's turn in line 9 is a reaction to Aapo's response or to the question the teacher has asked. Nevertheless, the teacher in the next instance initiates repair by enquiring from Aapo how it is possible that the parents could have children with straight hair (line 11), still gazing towards him. Aapo, however, is occupied with blowing at a piece of paper on his desk. Regardless of this, he gives an explanation during which he directs his gaze towards the teacher (line 12). The teacher laughs in response and compliments Aapo on his good, yet humorous explanation. Next he allocates the response turn to another student, who provides the correct response.

Here once again the teacher is performing the 'doing being still' that effectively seems to project trouble with regards to the student response (cf. example 36). However, here the teacher initiates repair verbally and requests the student to give an explanation for his response. All the actions the teacher performs, and does not perform, indicate clearly that the student response is problematic. It is the whole turn-of-action, silence + the verbal TCU, which accomplishes the interactional task of projecting the forthcoming repair work in the third turn action space. However, it is the teacher's verbal TCU that solicits an explanation from the nominated student, thereby giving him a possibility to specify his answer, to repair it.

What is interactionally relevant vis-à-vis the teacher's embodied orientation towards the class during the silence in line 8 is that Kaija orients to it as a sign of trouble. This becomes clear on line 10, where she visibly shakes her head in response to Aapo's turn and the silence that emerges in the teacher's incipient third turn action space. She performs a peer-repair through an embodied action. However, nothing in the teacher's conduct reveals that she takes notice of Kaija's action. The teacher appears to be concentrating on Aapo and what he is occupied with. In fact, it could be that during the silence he is waiting for Aapo to shift his gaze towards the teacher, which would explain why the latter does not produce the repair initiator sooner.

Interestingly, it is the same biology teacher whose reaction to student second turn responses is realized through the motionless embodied behaviour (recall ex. 36). Furthermore, the teacher's motionless body behaviour is deliberately employed in instances, where the student responses have deliberately been designed to be incorrect. It could be argued that the teacher's embodied behaviour, and silence, is his way of reproaching or not ratifying the student behaviour, since he does not reproach the student verbally. Verbalizing the reproach, and thus topicalizing it as an issue, would entail disruption of the fluent unfolding of the instructional sequence for the sake of dealing with the student's inappropriate behaviour (cf. Macbeth 1990). Instead of choosing to disrupt the instruction, the teacher performs the reproach through embodied means, by making himself motionless. The reproach is then only visually performed and the teacher is not perhaps as directly accountable to it as he would be if it were expressed verbally. If the teacher's stillness is also an interactional device to reproach student behaviour in addition to projecting a dispreferred third turn evaluation, it appears to be an economical way of accomplishing the reproach.

Again, the two examples in this section have demonstrated how teachers project the forthcoming third turn action as dispreferred through an emerging silence during which they keep their established embodied orientations constant until they initiate repair verbally. That teachers initiate repair and do not carry it out establishes a participation framework for the interaction that calls for the students' participation in the accomplishment of the repair. In the former example, this is made possible by the teacher's withholding of the answer, and in the latter, it is occasioned and made conditionally relevant by the respondent's designedly inappropriate answer.

6.3.4 Summary

The analysis in this section has shown that when student responses do not match the teacher established pedagogical focus, teachers frequently project through the use of several overlapping resources that repair is called for. In this respect, the present study reveals how teachers do not always perform other-initiation immediately after the students' problematic response turns, but rather they build a temporal space through which they project the forthcoming repair work thereby possibly leaving space for students to self-repair (cf. McHoul 1990). The TRP and beyond is generally one of the sequentially implicative positions in which the third turn action is made conditionally relevant, and thus the interactional site to initiate or perform repair in classroom interaction. Here, the focus has been on silence and particular types of embodied orientations and non-actions in lieu of or before the third turn action. They have been shown to project the dispreferred nature of the teacher's next action and the forthcoming repair work teachers embark on after non-target student responses. Silence as a projecting device has also been shown to be used in different types of third turn action constructs accompanied by diverging embodied and material orientations. That is, silence alone does not manifest the dispreferred nature of the evaluation, but it is interpreted vis-à-vis the teacher's body posture and his or her orientation towards the response: what the teacher does or does not do.

Silence and the teachers' accompanying embodied actions suffice to realize the interactional work of a repair initiator in their own right in that students take the initiative and produce the repair through self-selection. In such cases, the teacher's repair initiator can be considered to be silent, and visual, while the repair is accomplished through talk either by the producer of the trouble turn or by peers. In the above examples, the teachers held their gaze towards the transparency, the book or the class. In addition, in two cases, they did not begin to perform the required actions in order to reveal or write the correct answers, but withheld those actions until the expected response was presented. Such silences appear to be long, and they enable student initiatives in terms of taking the next turn-of-action, if there has been no verbal reaction from the teacher. The silence can also be followed by the teacher's third turn verbal TCU, which functions either as accomplishing the repair or as initiating the repair. In the former case, teachers correct the students' wrong answers, whereas in the latter case they give the students space to accomplish the repair.

The embodied orientations teachers have been shown to employ during silence and a verbal TCU include the continued gaze orientation either towards the pedagogical artefacts in use or towards the class, a motionless body posture and the withholding of revealing or writing the correct answer. However, what I have attempted to show through the analysis is that the embodied orientations are contingently shaped to fit the ongoing interaction as they take different trajectories and manifestations depending on the type of activity framework within which they are enacted and the pedagogical artefacts that are used to mediate the interaction.

Above all, this section has focused on demonstrating that students interpret silence and the different manifestations of the teacher third turn action space as interactionally meaningful in their sequentially produced position. They understand the absence of the teacher third turn evaluation as an indication of an emerging repair: they orient towards the second position student answer as problematic. In this way, the teacher third turn action is rendered conditionally relevant. I have also tried to show that students appear to choose what role to play in the repair work as they either let the teacher initiate it or they initiate the repair themselves. For each case the repair trajectory is different. It appears that this particular interactional environment – the third turn action space – is a legitimate interactional site, where students are afforded the right to self-select themselves as next speakers (see also Margutti 2004).

6.4 Third turn action constructs as interactional site for repair work

This section is devoted to the description of teacher third turn repair initiators or repairs that follow student second turn responses immediately or with a slight transition relevant space. The linguistic realization of such repair initiators and repair devices that occur in my data appear to be the same as reported in previous studies of content, L2 and CLIL classrooms. These include, among others, direct or embedded corrections (Kasper 1986), repetitions (e.g. Jung 1999; Hellermann 2003; Margutti 2004), recasts (Jung 1999), prompts or cluing (McHoul 1990; van Lier 1994; Jung 1999), clarification/specification requests (Kasper 1986), requests for expansion and justification (Nassaji & Wells 2000) and so forth. Altogether Seedhouse (2004: 164–186) lists eight repair devices for L2 classroom interactions, all of which are modified to the extent that they do not involve the use of direct negative evaluation. For CLIL classroom interaction, Dalton-Puffer (2007: 241–246) has observed that repair is generally unmodified and direct, while rejections and negative evaluations are used, but infrequently. She has also observed that the realization of repair depends on the nature of the trouble source (Dalton-Puffer 2007: 246). That is, linguistic errors in the CLIL classroom are repaired through different devices than content errors, thereby constructing a different order of repair organization for them in terms of preferential organization. To my knowledge, research in content or L2 classroom interaction has not hitherto shown such differences in accomplishing repair.

In general, the repair initiators and repair devices teachers employ are divergent and they address different types of problems in the students' response turns. The following repair devices can also be found in my data: repetitions of student wrong answers, teacher prompts, request for specification, rejections and explicit corrections. Some of these have already been encountered

in the above sections, but I have not touched upon the form of the teachers' verbal TCUs per se as I have wanted to concentrate on the embodied and material features in projecting the dispreferred next action. In this section, I will describe what kinds of embodied actions and material orientations are performed concurrently with different linguistic realizations, and how the different modalities are employed in projecting the dispreferred nature of teacher turns-of-action. At the same time, the section will begin to tie my research findings into the previous research on content, L2 and CLIL classroom repair and to reveal the complex nature of repair work in instructional interaction.

Below I will focus on only three different types of verbal repair initiators – repetitions, specification requests and rejections – that occur in my data, and the kinds of embodied actions teachers perform in conjunction with them. Each of them builds different types of expectations for the participants' actions, and they also exemplify some of the embodied resources teachers can employ in constructing their third turns as repair initiators.

6.4.1 Embodied trajectories in repetitions and specification requests

The first two examples show what kinds of embodied actions teachers perform when the third turn action is shaped as a repetition of the student response or as seeking specification for the response, thereby indicating trouble with the response. In both examples, the embodied resources teachers draw on are different as they are reflexively and contingently built to fit the ongoing interaction and the contextual configuration of the ongoing activity framework.

Example 41 comes from an EFL lesson; it is a continuation of example 17 from section 5.3.1. The structure of the teacher's third turn action takes the form of a repetition + silence + repair initiator. It exemplifies the trajectory the teacher's repair activities take and how the teacher's gaze trajectory, especially, displays the emergence of the dispreferred next action. The activity depicted in the extract is from checking answers to a listening exercise the class has just done. The exercise was about naming an occupation from a job description. The answer alternatives for each question are provided in the students' book, which serves as a mediator in the activity. This is reflected in the teacher's repair trajectory, as she visibly orients towards the book when constructing her third turn action.

(41) English_L1_Agree

1	T	four? {T GAZE DOWN AT HER BOOK, SITTING BEHIND HER TABLE
2		(1.0) T LOOKING DOWN AT HER BOOK KALLE RAISES HIS HAND, GAZE SHIFT TOWARDS T
3	T	whaddo you say about this one? {T GAZE DOWN AT HER BOOK, SITTING BEHIND HER TABLE {JARI HAND RAISE

```
4          (1.7)  T LOOKING DOWN, THEN RAISES GAZE TOWARDS CLASS
                  KALLE HAND RAISED STILL, GAZE TOWARDS T
                  RIINA RAISES HAND, GAZE DOWN AT BOOK
                  STUDENTS GAZE DOWN AT THEIR BOOKS
5     T    uh
           {T NODS, GAZE TOWARDS KALLE
           {KALLE GAZE TOWARDS T, LOWERS HAND
            {KALLE GAZE SHIFT DOWN TOWARDS BOOK
6     Kalle dii.
           {KALLE GAZE DOWN AT HIS BOOK
           {T GAZE TOWARDS KALLE
           {RIINA GAZE SHIFT TOWARDS T, LOWERS HAND
→     T    dii-↑i, accountant?
           {T GAZE SHIFT DOWN TOWARDS HER BOOK
           {KALLE QUICK GLANCE TOWARDS T
                {KALLE GAZE DOWN AT HIS BOOK
→          (1.4)  A STUDENT SAYS SOMETHING INAUDIBLE HERE
                  T LOOKING DOWN AT HER BOOK
                    AT 1.1 GAZE SHIFT TOWARDS CLASS
                  STUDENTS GAZE DOWN AT THEIR BOOKS
→     T     agree?
           {T GAZE TOWARDS CLASS
10         (1.0)   T GAZE TOWARDS CLASS
                   RIINA GAZE TOWARDS T
                   OTHER STUDENTS GAZE DOWN AT THEIR BOOKS
11    Jari häh?=
           {T GAZE TOWARDS CLASS
12    T    =>(do) you agree?<
           {T GAZE SHIFT TOWARDS JARI
13    Jari nelosessa
           in number four
           {T GAZE TOWARDS JARI
14         (1.0)   T GAZE SHIFT DOWN AT HER BOOK
15    Linda °no:[:°
           {LINDA GAZE DOWN AT HER BOOK
16    T       [yes.
           {T GAZE SHIFT TOWARDS JARI
17         (1.0)   T GAZE TOWARDS JARI
                     AT 0.5 GAZE SHIFT TOWARDS CENTRE OF CLASS
                   LINDA GAZE SHIFT TOWARDS T
18    T    >whaddo you suggest.<
           {T GAZE TOWARDS CLASS
19    Jari se oli se robber.
           it was the robber
           {T GAZE TOWARDS CLASS, LEANS SLIGHTLY FORWARD
20    T    you think it's the robber. ((T smiles))
           {T GAZE SHIFT TOWARDS CLASS
                    {VILLE NODS HIS HEAD, GAZE TOWARDS T
21    Linda y:es=
           {LINDA GAZE SHIFT DOWN TOWARDS HER BOOK
           {T GAZE TOWARDS CLASS
22    T    = £i (.) then£,
           {T GAZE TOWARDS CLASS
23         °>yeah okay<° (.) I think so too. (.) >it< must be the robber. ((T smiles))
                         {T GAZE TOWARDS CLASS
                              {T SMALL HEAD NODS
```

From lines 1–3 we can see how the teacher initiates a new activity segment. In line 4, she raises her gaze from her book towards the class. The gaze shift marks the impending speaker selection and turn-allocation, which take place in lines 4–5. Kalle produces a response (line 6), which the teacher repeats in line 7. The teacher also adds the occupation behind the letter d that Kalle suggests as the right answer. In terms of prosody, the teacher's repetition is slightly lengthened and produced with a notable rise in intonation. The immediately ensuing occupation is also produced with a rising intonation. The prosodically marked repetition and the specification of the occupation indicate that the student's response is incorrect. In general, prior research has shown that teacher repetitions that are produced with a rising intonation signal that the student response is in need of repair (e.g. Seedhouse 2004: 166; Hellermann 2003; Jung 1999). Consequently, the repetition not only indicates that the student response is not the correct one, but it also projects the emerging repair sequence.

When the teacher repeats the student response in line 7, she shifts her gaze down towards her book. It appears that the teacher performs the gaze shift in order to see the exercise and to see what occupation has been connected with the letter d. This is further endorsed by the fact that the teacher produces the name of the occupation after repeating the letter d. That the answer is incorrect is further emphasized by the silence that follows the teacher's turn (line 8). More importantly, the teacher continues to gaze down at her book. It is only in line 9 that the teacher shifts her gaze towards the class and initiates repair by inviting confirmation from the other students (*agree?*) (cf. Seedhouse 2004: 167–168). The turn is addressed to the whole class as she directs the gaze towards the class in general and not towards any particular student (see also Niemelä 2008).

None of the students however react to this immediately. In line 11, Jari produces a repair initiator *häh?* (Eng. huh) that indicates a problem of understanding what is going on. In latching onto the student's turn, the teacher reformulates her repair initiator as a yes/no -question (*do you agree?*). While doing this, she also directs her gaze towards Jari. What follows is an insertion sequence where Jari produces a candidate understanding in Finnish of what is taking place and intones his turn as a question that requests confirmation from the teacher about where in the exercise they are at (line 13). A short silence follows in which the teacher shifts her gaze back to her book, most likely in order to check that they are in fact at question four. In line 16, the teacher confirms Jari's request. However, in line 15 Linda self-selects herself as the respondent for the teacher's repair initiator and produces a disagreement. The design of the teacher's repair initiator not only makes conditionally relevant a disagreeing statement from the recipients, but it also seeks confirmation from the other students that Kalle's answer is not correct. At this point, the teacher gazes towards the class waiting for reactions from them. She also produces a prompt that invites students' opinions about the matter (line 18). It appears that the teacher has not heard Linda's response, as she does not react to it. In line 19, Jari self-selects and offers an alternative response designing his turn partially in

Finnish. The response he provides is correct. The teacher reacts to his suggestion by seeking confirmation from the whole class in English partially repeating Jari's response (*you think it's the robber*). Linda also aligns herself with Jari's response in line 21 and Ville in line 20 by nodding, his head gaze directed towards the teacher. Eventually, in lines 22–23 the teacher accepts the students' suggestions.

A combination of factors in this extract suggests that the teacher treats Kalle's answer as incorrect. First of all, the teacher's gaze shift in line 7 towards her book when she repeats the student's answer and the succeeding specification of the occupation behind the letter d through the marked intonation pattern serve to indicate this. Second, the teacher's continued, and somewhat motionless orientation towards the book during the long silence in line 8 further highlights it. Third, in previous activity segments, where the student response has been correct, the teacher has at this point provided an acknowledgement of the student answer and has quickly moved on to the next part of the activity. Here, the emerging silence and the teacher's embodied orientation, first gazing down at her book and then towards the class, imply problems with the response. There is a notable delay in the teacher's verbal reaction. The repair initiator that seeks other students' opinions about the matter explicitly marks the response as incorrect, and solicits repair from the other students. The design of the teacher's repair initiator opens the floor to multiple participants in that it is not addressed to anyone in particular, but invites reaction from the whole class. This makes it possible for the students to offer their answers by self-selecting themselves, which is what two of the students do. The repair trajectory the teacher constructs therefore furnishes the possibility for a jointly constructed repair sequence and the negotiation of the participants' mutual alignment vis-à-vis the proper answer. In this the teacher's gaze orientation and her display of participation is important. Lee (2008) has described how teacher third-turn yes/no -questions provide a resource for students to interpret what kind of a response the teacher is searching for, i.e. preferred or dispreferred (see also Margutti 2006). She also shows how the students are guided to understand what kinds of responses are expected from them. In the above example, not all the student turns are built on to the teacher's question, but they are constructed differently. This affects the interaction in that the teacher re-formulates the repair initiator by different types of requests for confirmation before the right answer is provided.

The following extract takes place in a biology lesson during an activity where the class is checking an exercise the students had done during the lesson. The exercise deals with pregnancy and ontogenesis. The activity is mediated by transparencies, one of which includes a monthly menstrual cycle. There is a circular image of the monthly menstrual cycle on the transparency that shows the days of the month. The teacher uses this to identify the correct answer. The answer he is looking for is thus very precise in that it includes the specific days of the month. The example demonstrates how the teacher initiates repair due to the student's inadequate response, and hence he invites a more specified response from that student, twice. The repair trajectory, in contrast to the

previous example, takes the form of teacher-initiated self-completed repair, where the nominated student is given the opportunity to self-correct. The example also illustrates the embodied work the teacher performs in projecting the forthcoming repair sequence and in re-initiating the second repair.

(42) Biology_When is that

1	T	what about this: pregnancy thing here (0.3) then. {T WALKS TO HIS TABLE, GAZE AT TABLE {T PICKS UP A TP FROM THE TABLE
2		this menstrual cycle. {T STEPS CLOSER TO OHP, CHANGES TP GAZING DOWN AT OHP
3	(Kaija)	(what?) {T GAZE SHIFT TOWARDS CLASS, STANDS BEHIND THE TABLE
4	Rauli	(x[xx)] ROWAN RAISES HIS HAND
5	T	[which are the days that] (0.9) are the best time to get pregnant. {T GAZE TOWARDS CLASS, STANDS BEHIND THE TABLE {T GAZE SHIFT FIRST DOWN TOWARDS TABLE {T GAZE SHIFT TOWARDS BL, WALKS FROM BEHIND THE TABLE TOWARDS STUDENTS
6		(2.6) from (these). {T WALKS TOWARDS STUDENTS, GAZE TOWARDS THEM {T STOPS, GAZE TOWARDS STUDENTS {T POINTS TOWARDS SCREEN W/ RH
7		(6.8) T STANDING IN FRONT OF STUDENTS LOOKING AT THEM
8	T	I would like to ask somebody else, {T GAZE TOWARDS THE STUDENTS, TOWARDS RIGHT ROW, STANDING
9		it's not that I don'- I- I don't like your answers they're good but .hh {T GAZE TOWARDS LEFT ROW
10		I would like somebody else to ans[wer.=Aapo] {AAPO HAND RAISE, GAZE TOWARDS T
11	Rowan	[mine (x][xx)]
12	Aapo	**[during] ovulation**. {AAPO GAZE SHIFT DOWN TO HIS BOOK, LOWERS HAND {T GAZE TOWARDS AAPO ***{T GAZE SHIFT TOWARDS SCREEN, BODY SHIFT TOWARDS THE RIGHT SIDE***
13		(0.5) **T GAZE TOWARDS THE SCREEN,** **BODY ANGLED TOWARDS RIGHT SIDE OF CLASS** AAPO GAZE SHIFT TOWARDS T

→ T **an whe- when is that.**
{T GAZE SHIFT TOWARDS AAPO
{AAPO GAZE FIRST TOWARDS T,
THEN DOWN AT HIS BOOK

15 Aapo like (1.0) what?=
{AAPO GAZE DOWN
{AAPO GAZE SHIFT TOWARDS PAULI
{T GAZE TOWARDS AAPO
{T GAZE SHIFT TOWARDS SCREEN

16 (Pauli) =°>I know<°

→ Aapo it's like (0.2) that bottom one.
{AAPO GAZE DOWN
{AAPO GAZE SHIFT TOWARDS FRONT
{T GAZE SHIFT TOWARDS AAPO

18 Rowan no.
{ROWAN GAZE TOWARDS T
{T GAZE SHIFT TOWARDS ROWAN

19 (2.2) T TURNS TO WALK TO THE FRONT OF CLASS
SOME STUDENTS GAZE DOWN AT THEIR BOOKS
OTHERS GAZE TOWARDS BLACKBOARD/SCREEN

20 Aapo @>shut up<@
{AAPO GLANCE TOWARDS ROWAN

21 T ((laughs))

22 Rowan it's the left one.
{ROWAN GAZE TOWARDS FRONT

→ T **so you mean these.=**
{T STANDING BEHIND THE TABLE LEANING TOWARDS OHP, GAZE TOWARDS AAPO
= T TAPS ON THE TP LOOKING AT AAPO

{AAPO GAZE TOWARDS BOOK
{AAPO GAZE SHIFT TOWARDS FRONT

24 Aapo uhh: >yea I guess so ↑yeah<
{AAPO GAZE SHIFT DOWN TOWARDS HIS BOOK
{T GAZE TOWARDS AAPO, STANDS BEHIND THE TABLE

25 T you guess so. (0.2) well that was a good guess.
{T GAZE TOWARDS AAPO, STANDS BEHIND HIS TABLE
{AAPO GAZE DOWN TOWARDS HIS BOOK
{AAPO GAZE SHIFT TOWARDS FRONT

26 Aapo yeah [aah]

27 Rowan [°(xx)°]

28 T yeah because (0.6) these here (2.0) mea:ns the ovu[lation.]
{T GAZE TOWARDS OHP, LEANS TOWARDS IT, MARKER IN RH
{T POINTS ON TP W/ MARKER
{T DRAWS ON TP

…

41 T okay hh so it's hh about uh
{T GAZE TOWARDS SCREEN, STANDING BEHIND THE TABLE
{T TAKES A STEP TOWARDS THE SCREEN
{T BEGINS TO POINT TOWARDS THE SCREEN

42 about uh (0.2) >one two three four five six seven< .hh
{T POINTS AT SCREEN, COUNTING POINTS

43 about the seven days when the: last mensu- menstruation ends
{T GAZE SHIFT TOWARDS CLASS, TAKES STEPS TO POSITION
HIMSELF BEHIND THE TABLE

44 that's the time for ovulation.
{T GAZE TOWARDS CLASS

The teacher initiates a new activity segment that calls for student responses in lines 1–6.[55] In line 10, a student raises his hand and the teacher immediately allocates the turn to him by gazing towards him and uttering his name. Aapo provides the response simultaneously shifting his gaze down towards his book (line 12). The answer is rather general in comparison both to the image displayed on the transparency of individual days of the month and the teacher's question about precise days. The teacher shifts his gaze from Aapo towards the screen as Aapo responds. That is to say, they each direct their gaze away from the other: while Aapo orients towards his book, the teacher turns towards the screen. The teacher's gaze shift is enacted for the purpose of comparing the student answer to the menstrual cycle depicted on the transparency, but instead of directing it to the transparency, the teacher directs his gaze towards the screen. This is because he is standing in front of the students and not behind his table at this point.

After the teacher has shifted his gaze towards the screen, there is a short 0.5-second transition space during which the teacher continues to gaze towards it (line 13). It is only after this that the teacher shifts his gaze towards Aapo and initiates repair (see the picture in the transcript). The teacher's repair initiation takes the form of a question that invites a more specific answer from the recipient. Pehkonen (2008, following Margutti 2004), described such teacher repair initiators as downgraded acceptances. That is, the teacher pursues a more specific response from the student that signals that the first response is not sufficient, if not completely wrong either. The student response does not match the pedagogical focus of the current activity (Seedhouse 2004). The repair initiator is addressed to Aapo. This is indicated by the fact that the teacher's

[55] Although the teacher waits quite a long time for student bids at the beginning of the activity segment (the silence in line 7), only one student bids for a turn at this point. The teacher reacts to Rowan's hand raise by explicitly stating that he does not want to nominate Rowan as the next respondent. Implicitly, the teacher's turn can be seen to act as an account. During the lesson, Rowan has been nominated as the respondent quite a few times, and it appears that this is the reason why the teacher formulates his turn the way he does and declines to nominate Rowan.

gaze is directed towards him. In response, Aapo produces a multi-unit turn that includes hesitations (line 15) and a candidate answer (line 17). The answer is once again not very specific and it is built on the basis of the image projected on the screen. But instead of looking at the screen, Aapo is looking down at his own copy of the monthly cycle, which is on his desk. In other words, Aapo makes a specific reference to the image (*that bottom one*), but does not give the exact days.

Next the teacher walks to the front of the class in order to stand behind the overhead projector and points to the transparency, indicating the days he assumes Aapo refers to (lines 19–23). Hence, the teacher initiates another repair that seeks further specification from the student (cf. Kasper 1986: 34). This he does by drawing on multiple semiotic means: the image on the transparency, pointing at a specific place on the transparency and direction of gaze towards Aapo. What is interesting here is that the teacher's confirmation-seeking turn and Aapo's gaze trajectory coincide so that when the teacher points and taps on the transparency (line 23), Aapo's gaze reaches the screen and thus the part of the cycle being pointed by the teacher. Consequently, it is easy for Aapo to produce the confirmation, which he provides in line 24, although the turn consists of a hesitation (*uhh:*) and an uncertainty marker (*I guess so*). In line 25, the teacher accepts Aapo's response and in line 28 he further clarifies that the days given at the bottom of the image are the days of ovulation. This further emphasizes that Aapo's original answer was correct, but the teacher wanted the exact dates of the monthly cycle to be explicated as well. The last lines of the extract (lines 41–44) illustrate how the teacher summarizes the correct response in relation to the diagram of the monthly menstrual cycle, thus making clear to all the students what the question was about.

In this extract, the repair trajectory is different from the previous example in that the teacher explicitly addresses the nominated speaker in his repair initiator and invites repair from him. The teacher's gaze in both repair initiation instances is first directed towards the screen/the transparency and then towards the student. In both instances, the teacher's orientation towards the image before the repair initiator also projects the emerging repair alongside the delay in the teacher's verbal reaction. Additionally the teacher's gaze trajectory highlights the importance of the image in the establishment of intersubjectivity, as throughout the repair sequence, the teacher guides Aapo's attention to the relevant units displayed in the diagram on the screen. He is thus trying to create a shared understanding of what it is that the teacher is after. Simultaneously the teacher guides Aapo to see the diagram in a particular way and to express his response in a particular way (see Margutti 2004) as the teacher narrows down his questions not only through linguistic means (McHoul 1990) but also through the pointing gesture (see also Kääntä 2007). The teacher accomplishes this by making explicit indexical references to the transparency and the diagram as interaction unfolds. However, the two repair initiators the teacher utters differ from each other in two ways: the form of the initiators varies and the role of the diagram is different in the teacher's turns-of-action. In the first instance (line 14), the teacher formulates the specification request so that it brings the relevance of

the monthly cycle more generally into the design of the answer: a temporal answer is sought from the student. The second repair initiator (line 23) is a candidate understanding from the teacher of the student's answer. It explicitly seeks confirmation of the teacher's reference that the pointing gestures index from the diagram.

In summarizing the above examples, it can be said that although while verbally the repair initiators are shaped differently in the form of repetitions and specification requests, there are certain similarities in the teachers' embodied actions. In particular, the teachers' gaze trajectories are shaped in ways that reveal their orientation towards the pedagogical artefact and its essential role in the forthcoming third turn action. In both examples, the teachers direct their gaze towards the materials to compare the student response to the expected one, thereby highlighting the relevance of the artefact as a domain of scrutiny that functions as the basis for the repair initiator. While in example 41 the teacher shifts her gaze towards the class and seeks confirmation of the correctness of the response from the other students, in example 42, the teacher directs his gaze to Aapo and marks him as the recipient of the repair initiator. In example 42, both the teacher's repair initiators are constructed the same way in terms of gaze, but the second is additionally emphasized by the pointing gesture that underlines the interactional relevance of the diagram for the repair initiator and the response sought from the student. In addition to gaze trajectory, the verbal realizations of the repair initiators construct different types of repair trajectories vis-à-vis who is being addressed (*agree?* vs. *when is that*). In example 41, the teacher opens the conversational floor to all the students, thereby building a space for their self-selections. In example 42, the teacher, in contrast, specifically pursues the correct answer from one student.

6.4.2 Embodied actions in rejecting third turn actions

In addition to repetitions and specification requests, teacher repair initiators in my data are linguistically realized through different types of rejections, i.e. teacher third turns are verbally constructed through the use of 'no' and its derivates. However, they seem to be used only by EFL teachers when procedural types of repairables are not included in the analysis.[56] Prior research on L2 classroom interaction has shown unmitigated negative evaluations to be an infrequent phenomenon, while they are still used occasionally (e.g. Seedhouse 2004, 2001; Jung 1999). Jung (1999), for instance, has found out that teachers perform other-initiated other-completed repair in the form of unmodulated 'no' in teacher-led activities. The present analysis both supports Jung's findings and also elaborates them insofar as it reveals that unmodulated

[56] The CLIL biology teacher performs other-initiated other-repair through negatively constructed turns-of-action, but characteristically these occur in different types of procedural contexts, where the trouble source is associated with how students carry out activities, not with the form or content of their responses (see Seedhouse 2004: 172–175).

third turn actions function as repair initiators, not solely as repair completion devices. The present analysis equally elaborates Seedhouse's findings (2001, 2004) by revealing in what kinds of sequential contexts and contextual configurations direct negative evaluations are uttered.

Seedhouse (2001, 2004) has pointed out that L2 teachers tend to avoid the use of 'no' constructed evaluations as it is pedagogically advisable not to consider learner errors in a negative light but rather as a positive feature in the learning process. According to him (2004: 175–176), because teachers tend to avoid the use of direct negative evaluations, it creates a paradox in that pedagogically teachers communicate to learners that it is acceptable to make errors, while interactionally they display that it is not. Although there is only a handful of two types of rejections in my data, they reveal interesting characteristics with respect to projecting dispreferred next actions. The first are rejections which simply seem to be produced by the teacher as reactions to students' incorrect answers. They are direct and unmitigated in character and they are not foreshadowed by any projecting actions – not by embodied or verbal means during the student second turn responses or at the TRP. An example of such a rejection is provided in example 43. The second type consists of rejections in which the dispreferred nature of the third turn is prefaced in turn-initial position through a variety of means, both embodied and linguistic. Examples 44 and 45 demonstrate how rejections of this kind are realized.

The first example comes from an EFL lesson, where the class is going through vocabulary related to a text the class is about to listen to. The same extract was discussed in conjunction with teacher head nods as embodied allocations as example 29 (section 5.4.2). Here the example illuminates how the teacher constructs her turn-of-action as a multi-unit turn, both units comprising negation words. The example begins with the teacher's initiation, which is the word the students need to translate into Finnish. From line 2, we can see how the teacher is looking at the class waiting for student bids. Although Jari raises his hand, the teacher does not allocate the turn to him. Instead, she repeats the target word (line 3) and keeps looking at the class. At this point, Raimo also raises his hand. Despite the two raised hands, the teacher allocates the turn to a non-bidding student, Jarmo, in line 5. The allocation takes the form of a question that identifies Jarmo in turn-initial position as the respondent.

(43) English_L1_It's not hakemus

1	T	app↓licant. {T GAZE SHIFT TO CLASS
2		(2.2) T LOOKING AT CLASS JARI RAISES HIS HAND, GAZE FIRST DOWN AT HIS BOOK, THEN SHIFTS TOWARDS T BOYS IN CAMERA VIEW: GAZE DOWN AT THEIR BOOKS
3	T	applicant? {T GAZE TOWARDS CLASS, LEANING FORWARD {JARI HAND RAISED, GAZE SHIFT DOWN AT BOOK {RAIMO HAND RAISE, GAZE DOWN

4		(1.0) T LOOKING AT CLASS, LEANING FORWARD JARI HAND RAISED, GAZE DOWN RAIMO HAND RAISED, SHIFTS GAZE TOWARDS T SOMEONE WHISPERS
5	T	Jarmo (0.2) what's an applicant (0.3) {T GAZE TOWARDS JARMO, LEANING SLIGHTLY FORWARD {T GAZE SHIFT DOWN AT HER BOOK {T GAZE SHIFT TO JARMO {RAIMO & JARI LOWER THEIR HANDS
6		any idea? {T GAZE TOWARDS JARMO
7	Jarmo	se on se, hakemus °tai (x)° it is the application or (x) {T GAZE TOWARDS JARMO
→	T	**no:? it's not [hake]mus,** {T GAZE TOWARDS JARMO **{T STRAIGHTENS HERSELF IN THE CHAIR INTO UPRIGHT POSITION** {T GAZE SHIFT TOWARDS LEFT SIDE OF CLASS {T POINTS TOWARDS NADIR
9	(Jarmo)	[(x)]
10	Nadir	hakija.= applicant {T POINTS TOWARDS NADIR {T HEAD TURNED TOWARDS LEFT SIDE OF CLASS
11	T	=hakiJA (0.3) APPLICATION (0.7) <is hakemus> applicant (0.3) application is application {T WITHDRAWS POINT, SHIFTS HEAD POSITION {T GAZE TOWARDS JARMO {T GAZE SHIFT DOWN TOWARDS HER BOOK

In line 7, Jarmo provides a translation. However, from the design of the response we can see that Jarmo is not fully sure of the answer as the turn-ending is constructed through the use of the particle *or* and produced in a notably quieter volume than the beginning of the turn. The 'or' in turn-final position can be seen to act as an uncertainty marker or as indicating that there is an alternative answer. Unfortunately the rest of the turn is inaudible, thus making it difficult to say how it ends. However, the teacher rejects the response verbally by looking at Jarmo (line 8). The teacher does not project the rejection in any way through her embodied actions, as she keeps gazing steadily towards Jarmo after having nominated him. The rejection is built of two parts. In turn-initial position is the negation 'no' which is lengthened and uttered with a rising intonation. Concurrently with the negation, however, the teacher straightens herself into an upright position in her chair, thus changing her body position and displaying her stance towards the answer (line 8). She at this point breaks the focused participation framework she and Jarmo have constructed through the turn-allocation–response sequence. In addition to the negation, the teacher explicitly formulates the evaluation as a rejection (*it's not hakemus*). More importantly, while she elaborates on the negation, the teacher is already allocating a next speaker turn to Nadir by pointing towards her (line 8).

The example is interesting in that the teacher allocates the response turn to a non-bidding student and yet still rejects the response in a straightforward manner, although the student provides a candidate response. It can only to be assumed that the teacher expects the students to know the translation for the word and assumes that it is an easy task for them to find the equivalent Finnish word. This is further indicated by the fact that the teacher does not initiate repair per se, but allocates another response turn to another student while rejecting Jarmo's answer. It appears that the rejection itself functions and is interpreted as a repair initiator since at least one student, Nadir, bids for a turn immediately. It is also notable how the teacher in line 11 turns towards Jarmo and clarifies to him what 'hakemus' is in English in addition to emphasizing the Finnish word ending *-ja* and the English suffix *-tion* (cf. 'hakemus' and 'hakija') that differentiate the two nouns 'applicant' and 'application' in Finnish and in English from each other. In that respect, Jarmo's response was not that far off: it was only a question of the wrong morphological inflection of the noun.

In the following example, the teacher's rejection is built directly on the student's answer and as such the negative format the teacher's evaluation takes is designed to fit the student turn, the question, even though at the same time it evaluates the student answer (see Seedhouse 2004: 168–171). The repair trajectory takes the form of teacher-initiated peer-completed repair. The activity depicted in the example is from an EFL lesson, where the class is going through English idioms the students are to translate into equivalent Finnish idioms. The idioms are on a transparency and the teacher reveals them one by one as they proceed in the activity. The teacher is standing behind her table near the overhead projector.

(44) English_L2_Not quite

```
1          (1.9) T LEANING CLOSER TO OHP MOVING THE TP
                 SOME STUDENTS GAZE TOWARDS THE FRONT OF THE CLASS

2     T    well next one might be more familiar to ↑you
           {T BEND SLIGHTLY FORWARD, GAZE TOWARDS CLASS
                                    {T GAZE SHIFT TOWARDS TP,
                                     LEANS CLOSER TO OHP

3          what are four le- (0.3) four letter words,
           {T GAZE TOWARDS TP, PULLS COVER SHEET DOWN
                                 {T GAZE SHIFT TOWARDS CLASS,
                                  STRAIGHTENS HERSELF

4          >an why shouldn't you use them in your essays.< (0.8)
           {T TAKES STEPS AWAY FROM OHP, CROSSES ARMS IN FRONT,
           GAZE TOWARDS CLASS

5          >what sort of words are four letter words.<
           {T GAZE TOWARDS CLASS

6          (2.5) T LOOKING AT CLASS
                 SOME STUDENTS GAZE TOWARDS THE FRONT OF THE CLASS

7     T    >have you ever heard this one?<
           {T GAZE TOWARDS CLASS
               {LIILIA HAND RAISE, GAZE TOWARDS T

8          uhh Liilia.
           {T GAZE TOWARDS CLASS
```

9	Liilia	onks se (niitä) lyhenteitä? is it (those) abbreviations? {LIILIA GAZE TOWARDS T {T GAZE TOWARDS LIILIA
→	T	.**HHHH not quite? no,** **{T GAZE TOWARDS CLASS** ***{T HEAD MOVEMENT FROM RIGHT TO LEFT AND BACK***
11		(2.4) T LOOKING AT CLASS MOST STUDENTS GAZE TOWARDS THE FRONT OF THE CLASS
12	T	they a:re (0.2) sort of what sor- >shall we say,< (0.6) {T GAZE TOWARDS CLASS
13		they're ai- (0.2) (are they) bad words or good words? {T GAZE TOWARDS CLASS
14		(1.0) T LOOKING AT CLASS MOST STUDENTS GAZE TOWARDS THE FRONT OF THE CLASS
15	T	@wha couttei be:?@ (0.7) four letter words {T GAZE TOWARDS CLASS
16		(1.5) T LOOKING AT CLASS MOST STUDENTS GAZE TOWARDS THE FRONT OF THE CLASS
17	T	<now you all> (0.5) think about the words tha' you shouldn't use. {T GAZE TOWARDS CLASS
18		(1.5) T LOOKING AT CLASS SELJA RAISES HAND, GAZE TOWARDS T MOST STUDENTS GAZE TOWARDS THE FRONT OF THE CLASS
19	T	Selja {T GAZE TOWARDS RIGHT SIDE OF CLASS
20	Selja	kirosanoja swear words {SELJA GAZE TOWARDS T {T GAZE TOWARDS CLASS
21	T	yeah that's right. (.) {T GAZE TOWARDS CLASS
22		NOW THINK ABOUT A- ALL THE ONES YOU KNOW,
23		.hh an count how many letters there are in them, (0.4)
24		so you know. (0.5) like heck or darn an so on.

From lines 2–5 we can see how the teacher initiates a new activity segment and how she positions herself so that she is standing behind her table gazing towards the class by line 4. The teacher's initiation is followed by a silence during which none of the students bid for a turn nor offer a candidate answer (line 6). Consequently, in line 7 the teacher reformulates her initiation and asks the students whether they have ever heard the expression. At the same time Liilia raises her hand gazing towards the teacher, and the teacher allocates the response turn to her (line 8). Liilia builds her response as a yes/no question that seeks confirmation from the teacher (line 9) (cf. Jung 1999 for 'try-marking' through intonation or Seedhouse 2004: 171). The teacher in line 10 constructs her third turn as a reply to Liilia's turn. From the long and rather loud pre-beginning in-breath the teacher performs, it becomes clear that the teacher's evaluation of the student turn is to be dispreferred. The in-breath is followed by

the TCU: the rejection of the student answer that is accompanied by a slow head shake. The teacher rejects the student answer and marks it as wrong. A silence follows during which the teacher is looking for other candidates (line 11).

The fact that the teacher visibly scans the class waiting for student bids during the silence in line 11 indicates that the teacher treats the rejection as a sufficient signal that other candidate responses are called for. In other words, the rejection is designed to function as a repair initiator as well. From an embodied perspective, there is nothing specific in the teacher's actions (line 10) before the TRP or the turn beginning that would project that the student's answer is incorrect. The only sign implying the dispreferred character of the turn is the long and loud in-breath that delays the actual production of the multi-unit TCU (see Schegloff 1996). It is notable however that the teacher in addition to rejecting the response verbally shakes her head at the same time. More importantly, the teacher's turn includes two negations, of which the direct negative *no* is in turn-final position. Thus it appears that the teacher is mitigating her rejection to some extent by producing the negations in a particular order. The mitigation also seems plausible considering that the teacher's negative response to the student's yes/no question in itself is a dispreferred action (cf. Seedhouse 2004: 171). The preferred action would be to confirm the student's candidate suggestion.

Because there are no student bids, the teacher explicitly initiates repair in lines 12–13 by providing further cues in order to help the students find the correct answer across several TCUs (lines 12–17) (see e.g. McHoul 1990). The cues take different forms such as questions and hints. In line 18, Selja raises her hand and on seeing it the teacher allocates the response turn to her (line 19). Selja provides the right answer and the teacher evaluates it positively in line 21. Throughout the activity segment the teacher is looking toward the class. Her orientation towards the class displays to the students that she is seeking candidate offers to the question.

Although the ongoing activity is mediated by the transparency which contains the idiomatic expressions, the transparency is not used here in the same way as in the previous extracts: it does not contain the right answers and thus the teacher does not reveal them on it. In example 43, in contrast, the right answer is in the book, and thus the teacher does not, for instance, have to write it down. What this implies in terms of the unfolding interaction in both activities is that the right answers are only verbalized through the interaction, meaning that there is no domain of scrutiny that would play a role in how the teacher third turn action is shaped as dispreferred. The teachers in these examples draw on multiple semiotic resources to convey that the response is not what they are looking for, but not on any material artefact. The contextual configuration of the activity frameworks is once again a particular kind, and it has an influence on the potential turn-constructional elements the teachers can draw on in designing their third turn actions as dispreferred.

In the last example, the activity framework is different in that it is carried out by the teacher writing the correct answers on the transparency. In order to write the answer on it, the teacher needs to bend over the overhead projector.

Example 45, which was already discussed as example 34 (section 6.2.2 above), displays how the teacher projects the forthcoming negative evaluation by a sudden cut-off body movement. Instead of carrying out the body movement to completion over the overhead projector, the teacher retracts her already bent body back into a standing position, which is her home position during the activity. The teacher's embodied action that prefaces the verbal evaluation indicates that there is a problem with the student answer, thereby projecting the emerging repair sequence. Here I want to focus on the verbal design of the turn and how it is shaped as dispreferred through a variety of semiotic means.

(45) English_L2_not actually pliers (part of it)

4		(1.9) T LOOKING AROUND AT CLASS SELJA RAISES HAND, SHIFTS GAZE TOWARDS T
5	T	uhh Selja {T GAZE TOWARDS SELJA {SELJA GAZE TOWARDS T
6	Selja	pliers {SELJA GAZE TOWARDS T {T GAZE TOWARDS CLASS, **BEGINS TO BEND BODY TOWARDS THE TP=**
→	T	**.HHH well those are not actually pliers .hhh** **={T STRAIGHTENS BODY BACK, T GAZE TOWARDS TP** {T GAZE SHIFT TOWARDS CLASS {T HAND GESTURE {T HAND PUSHING GESTURE
8		but the pliers are the other ones that look= {T GAZE TOWARDS THE CENTRE OF CLASS {T GESTURES {SELJA ORIENTS TOWARDS HER BOOK
9		=almost like that. {T GAZE TOWARDS CLASS MORE LEFT SIDE, GESTURING {T GLANCE TO RIGHT SIDE OF CLASS
10	(Hannu)	(x[xx)]
11	T	[so: Virve] {T GAZE TOWARDS LEFT SIDE OF CLASS
→	Virve	°pinsers° {T GAZE TOWARDS VIRVE **{T GAZE SHIFT TOWARDS TP=** **{T BODY SHIFT TOWARDS OHP=**
→	T	[yeah these are called pinsers.] **={T BENDS CLOSER TO TP, GAZE TOWARDS IT**
14	LM	[(xx]x)
15		(2.5) THERE IS TALK at the background T WRITES THE ANSWER ON THE TP

When looking at the teacher's third turn action, we can see how she constructs it as a multi-unit turn. First of all, in line 7, the loud in-breath that delays the beginning of the actual TCU is in turn-initial position (see Schegloff 1996). The in-breath is performed in conjunction with the cut-off body movement and the teacher's continued gaze orientation towards the class (instead of towards the

transparency on the overhead projector, which she would do in the case of a positive evaluation). Next, the discourse marker *well* at the beginning of the TCU further manifests that the emerging turn is dispreferred. In addition, the evaluation itself is constructed as a negative statement that rejects the student's response. Finally, in lines 8–9, the teacher's turn-of-action continues so that she adds a clue that specifies what pliers look like. The whole turn-of-action thus functions as a repair initiator.

In this extract, the teacher's verbal rejection is mitigated insofar as it is prefaced by both paralinguistic (*.HHH*) and syntactic (*well*) means. The teacher thus protects the student's face by framing her rejection with several mitigation devices that at the same time herald the repair action the teacher produces. The example illustrates how interrelated teacher evaluative practices are, and above all, how teachers draw on several resources to achieve their goals for a particular activity segment without causing the students unnecessary loss of face.

All in all, there are not many rejections in my data in activities organized according to the basic tripartite instructional sequence. This is in line with previous findings on teacher evaluative practices in terms of verbal turn organization (cf. Seedhouse 2004, 2001; Jung 1999). But when observed from a multisemiotic perspective, teachers in projecting the emerging third turn action as dispreferred accomplish it in a variety of ways: both on the sequential and turn-organizational level of interaction. The projection devices, whether a cut-off body movement or a loud in-breath, are used to mitigate the directness of the rejections. In addition, the fact that the use of the negative word 'no' is delayed in the verbal TCU adds to the mitigated character of the turn-of-action. However, when teachers do not use any projection devices, the rejections can be quite direct, and in such cases, it appears that not many embodied or other semiotic resources are used together with the negation to mitigate the repair (see also Pehkonen 2008: 76–80). It is as if the negation is sufficient in itself when in turn-initial position.

In terms of repair actions, the students seem to interpret and treat the rejections themselves as repair initiators in that they raise their hands to bid for a turn and hence to offer candidate answers (see e.g. Macbeth 2004). The repair trajectory in such repair sequences appears to be that of teacher-initiated peer-completed repair. It is the teacher who regulates the turn-taking: students are not afforded opportunities to self-select themselves as next speakers. This is in contrast, for instance, with evaluative repair sequences where the third-turn action space is occupied with silence, as at such sequences the students can self-select themselves as next speakers and thus initiate repair.

6.4.3 Summary

The present section has, it is hoped, demonstrated how in most cases, teachers employ a variety of semiotic resources, embodied orientations and trajectories as well as paralinguistic means, in prefacing their emerging third turn actions as dispreferred. Concurrently, such projecting devices mitigate, to an extent, the

forthcoming repair actions teachers embark on. These projection elements also constitute devices that delay the initiation of the actual TCU (Schegloff 2007, 1996). Consequently, it is not only particular types of verbal devices, such as repetitions and request for specification, that are drawn on in shaping third turn actions as mitigating and face-saving: various interlinking communicative means both verbal and embodied feature in the character of the turn-of-action and the interactional task it accomplishes. In this respect, the analysis draws a more complex picture of teacher third turn repair practices than previously has been described in classroom interaction research.

The third turn repair actions in focus in the present section are performed by teachers in the TRP or after a slight delay. Thus, they differ from the previous ones in that the third turn action space is occupied almost immediately by the paralinguistic or verbal TCUs that are utilized to initiate repair. The particular realizations I have focused on have centred on teacher repetitions, specification questions and rejections. The embodied and material resources drawn on vary in each realization depending on the overall contextual configuration of the activity framework, i.e. what the role of the mediating artefact is, what kinds of responses are required from students, what teachers are required to do in order to establish the correct answers and so forth. The primary projection devices I have introduced here are the teachers' gaze trajectory towards the pedagogical materials (ex. 41 and 42) and its significance in projecting the forthcoming repair. Additionally, the teacher's cut-off body movement in conjunction with a loud in-breath (ex. 45), and a head shake (ex. 44) have been shown to play a meaningful role in foreshadowing the repair work. What has also been essential is the different participant configurations the distinctly realized third turn actions create for the emerging interaction. In some cases, teachers build interactional space for the students to self-select themselves as next speakers through performing peer-repair, while in other instances, teachers seek particular students' participation; for instance the participation of the already-nominated student in the form of self-repair.

6.5 Chapter summary

The focus in the present chapter has been on describing the various multisemiotic resources teachers draw on in projecting their emerging third turn actions as dispreferred within activities that are structured according to the three-part instructional sequence of IRE. By describing the teachers' multisemiotic repair practices, their embodied and material actions, the analysis has served to reveal the different sequential positions in and through which repair work is projected to be in play. More importantly, the description has shed light on how the different positions, on the one hand, are enabled and, on the other hand, are manifested by the use of distinct types of projecting and repair devices. In general, the repair sequences that have occurred in the data

have been identified on the basis of the established pedagogical focus of individual activities, and whether or not the student responses have met that focus (Seedhouse 2004).

Here, I will briefly draw the results together from two perspectives. The first concerns with the phenomenon of the *third turn action opportunity space* as the interactional site within the IRE sequence that is used to evaluate student second turn responses. The second perspective is related to the reflexive relationship between pedagogy and the organization of repair and the role the contextual configuration of the current activity plays in it. In other words, how the analysis has made explicit that particular types of repairs occur in particular kinds of activities in which the repair is influenced not only by the nature of the repairable, but also by the mediating artefact.

Third turn action opportunity space

At the beginning of the chapter I introduced a new concept, that of a third turn action opportunity space, which I suggested can be seen to cover all the possible sequential positions in and through which teachers can accomplish the interactional task of evaluating student responses. Notwithstanding the fact that the analysis has primarily centred on the ways in which teachers initiate or perform repair, i.e. indicate that student responses are problematic vis-à-vis the current pedagogical focus, and that I have only briefly touched upon the character of positive evaluations, the concept is meant to be understood relative to the overall social action teachers perform in the third turn action space, and not only to repair work. By describing teacher repair practices from a multisemiotic perspective, I have attempted to show the different sequential positions that manifest that a repair action is in the making, thereby indicating that a student response is not what the teacher is looking for. In effect, the analysis should have made clear that the point of initiation of repair actions varies sequentially within the IRE sequence and that these positions are sequentially adjacent to one another (cf. Schegloff et al. 1977: 375).

The first sequential position in which repair was shown to be at play is during the second turn student response. The analysis has shown how teachers in a variety of sequential positions display their orientation towards forthcoming student responses and their comparison against the correct answer by directing their gaze towards such teaching materials as transparencies or books or by preparing to write the answers on the transparency or on the blackboard. Such gaze shifts, and possible shifts in body posture, have been shown to take place already when teachers nominate next speakers (chapter 5), at the TRP and after students have begun to produce their responses. In most cases, by orienting to student responses in such a way teachers are signalling that the responses are unproblematic; they expect that the correct answer will be forthcoming. However, as students produce the responses, teachers follow their progress, parsing them as they are delivered. When the responses appear to be insufficient or inadequate, teachers display their evaluation already during the response, or at the TRP, thus projecting repair.

The embodied and material devices teachers employ in projecting their next actions as dispreferred relate a) to the withholding of revealing the answer during the response and up to or during the following verbal TCU, and b) to a cut-off body movement at the TRP or in pre-turn position of the third turn TCU. Thus, the projection of the nature of the next action is accomplished purely through visual means, after which the repair work is instantiated through talk. The fact that teachers draw on embodied resources in projecting repair when students deliver their responses enables the participants' overlapping turns-of-action: student verbal response and teachers' embodied projection of the dispreferred next action.

The second sequential position covers the TRP between the adjacency pair 'student response–teacher evaluation' and the third turn action space, which is deployed to build distinct types of third turn action constructs through the use of silence. The first of these is the emergence of a silence in lieu of a third turn verbal TCU. It was shown to project and accomplish repair in its own right as a teacher-performed repair initiator in conjunction with the teachers' continued embodied orientations towards either the teaching materials or the class. To that end, the teacher repair initiator was shown to be performed through embodied means only, thereby rendering it a silent and visual turn-of-action on the teacher's part (cf. embodied allocations in chapter 5). In particular, it was shown how a motionless body posture performed by the teacher during the silence had import for its role as a repair initiator in its sequential position. Such silences were followed by a student-accomplished repair as a next action, in which case students self-selected themselves as next speakers. The students thus treated the teacher's embodied orientations as meaningful in their sequential position, and interpreted the longish silences as indicators of trouble vis-à-vis the student second turn response.

In addition to silence in lieu of the third turn, silence also emerged as a projecting device, delaying the production of the teacher's verbal TCU in the third turn action space. These silences were equally accompanied by the teachers' embodied orientations or differing gaze trajectories to teaching materials or towards the students. However, they were both followed by teacher-performed repair and by student-performed repair, either by self or by a third party.

The third sequential position in projecting that repair is on the way is the third turn action after the TRP. These third turn actions assume a variety of linguistic realizations and they address the trouble in the student response turns in distinct ways. Some of these are prefaced by different types of projecting devices, both paralinguistic (i.e. loud and long in-breaths) and embodied actions (i.e. cut-off body movements or other accompanying actions). Co-occurring verbal and embodied means can thus be used in foreshadowing repair work, but both are not necessarily employed. This is particularly the case with explicit rejections (i.e. the negative word 'no' in turn-initial position) as they seem not to be accompanied by any prefacing devices indicating that a dispreferred next action is in the making. However, when different projecting

devices are employed they seem to mitigate the directness of such rejections as well as that of other types of repair initiators.

What the analysis has brought to light is the distinct repair action constructs and the types of repairs within the IRE sequence that serve to create interactional space for student participation in terms of turn-taking. In other words, the analysis has shown that the divergently realized repair trajectory of other-initiated other-repair in the institutionalized, multiparty setting of classroom interaction creates different types of participation opportunities for students, even within teacher-led activities. Although in IRE-based activities the students' participation is primarily managed by the teacher, there appear to be particular kinds of realizations of repair, in which students are afforded the possibility to self-select themselves as next speakers. Silence as a third turn action or as part of a third turn action is one of these repair constructs. In addition, some of the repair initiators carried out in the third turn space furnish the possibility for students' self-selections. This is however dependent on the type of repair initiator and what kind of a participation it makes relevant. In general, in form-and-accuracy contexts in L2 classroom interaction, the turn-taking organization is tightly managed by the teacher, as characterized by Seedhouse (2004: 102–105). Yet the exploration of the potential sequential positions in which repair can be seen to be in play within IRE-based activities has illuminated how complex a phenomenon the realization of repair work is with respect to the interactional organization of repair in classroom interaction. This becomes clear through the finding that even in the most teacher-controlled classroom contexts, there is room for flexibility in the participants' turn-taking. What is noteworthy, however, is that these student self-selections are essentially teacher-occasioned in the sense that it is the teachers' embodied behaviour that solicits the self-selections: the teacher has not verbally nominated the next speaker.

In sum, I have attempted to show in chapter 6 the distinct ways in which teachers design their third turn actions by first projecting through embodied and material means that a repair action is emerging. I have also described what takes place after such projecting devices have been performed in terms of what kinds of repair trajectories are constructed and what is accomplished through the repair work. The analysis has thus centred on rather small phenomena that teachers make use of in accomplishing their third turn actions, the realization of which is highly context-dependent on the overall characteristics of the current activity framework. Yet at the same time the analysis has shed light on how the use of the projecting devices figures in the verbal and sequential production of the third turn action, the repair initiator or the repair performed in and through it, thus providing new insights with respect to previous classroom repair studies (Kasper 1986; McHoul 1990; van Lier 1994; Jung 1999; Seedhouse 2004; Margutti 2004).

Reflexive relationship between pedagogy and the organization of repair and the contextual configuration of the current classroom activity framework

As suggested in the rationale in chapter 1, the preference organization in terms of repair is different in distinct content/language classroom contexts. This is due to the variation in pedagogical focus between the different classroom contexts. The present analysis has sought to illuminate the important role of the contextual configuration of individual activity frameworks in the accomplishment of teacher third turn repair actions, and in particular, in revealing how the different features of the configuration are employed to project dispreferred next actions. The contextual configuration involves not only the pedagogical goal of the activity and the artefacts used to mediate the interaction, but also the types of responses students are to produce and the actions teachers are required to perform in order to display, or otherwise make known to the class, the correct answers. In addition, the contextual configuration comprises the sequential organization of interaction and the participants' jointly established participation framework within each IRE sequence (cf. Goodwin 2000a, 2003).

The fact that a variety of pedagogical artefacts, i.e. books, transparencies, and blackboards, are employed as mediators in teaching has an effect on how interaction through the IRE sequence is realized sequentially. Heath and Hindmarsh (2002: 117–118) have highlighted that

> "[r]ather however than treating material realities as having an overarching influence on the field of conduct and thereby assuming that their sense and significance remains stable throughout the emerging course of events, such as a medical consultation, we need to examine the ways in which objects, artefacts and the like come to gain their particular significance at specific moments within courses of actions."

In classroom interaction, the different artefacts feature in the participants' actions as meaningful domains of scrutiny that help students to find correct answers, e.g. in books, and serve to display right answers to them, e.g. on key transparencies or on the blackboard. Effectively, the participants' orientation to these materials is imminently present throughout the IRE sequence, but it is particularly prevalent during student response turns and the simultaneous or ensuing teacher evaluations. The pedagogical artefacts become momentarily meaningful and interactionally relevant when participants draw on them as a basis for not only constructing their own emerging actions, but also for interpreting the other's unfolding actions. Teachers orient to books, transparencies and blackboards when students provide their responses, and through that orientation they manifest their ongoing interpretation and future treatment of the responses. Students, for their part, direct their attention to them when they prepare to receive the teacher evaluations of their responses.

The nature of the pedagogical focus of an ongoing activity together with the pedagogical artefact used to display correct responses figures in the realization of teacher third turn actions as well as in the kind of repair trajectory enacted. When students are to produce relatively long answers that are found

in their books and that teachers reveal on transparencies, the character of the participants' actions is influenced by this in that they both gaze towards their respective object domains and simultaneously perform their respected participant actions. That the correct answers when revealed are already available for the class on the transparency renders peer-performed repair work redundant: teachers can correct students' incorrect responses without further interactional effort. Concurrently, they can also display the emerging repair work by withholding the revealing of the correct answers, thus delaying, and therefore slightly mitigating, the forthcoming repair action. In contrast, when teachers need to write student answers on the transparency or on the blackboard, the answers tend to be shorter, one- or two-word items, and teachers visibly display either during or right after a student response how the response is to be treated. Teachers perform different types of cut-off body movements or motionless body postures together with particular gaze trajectories to project repair work. In case of shorter response types, teachers initiate repair to obtain the correct response from the class instead of performing teacher-initiated teacher-repair. However, teachers perform such repairs in cases when they have not received adequate answers from third parties either (cf. McHoul 1990) or when no third parties volunteer to suggest further answers.

It could be suggested that there is a certain amount of interactional economy and functionality in teachers' repair practices as the affordances and constraints created by the contextual configuration of the different activity frameworks are purposefully exploited by teachers in accomplishing repair work. In chapter 3, it was mentioned that teacher repair devices have functional relevance and appropriateness in different classroom contexts (Seedhouse 2004: 159–162). What the present analysis implies is not only that repair is shaped to fit the organization of interaction and the pedagogical focus of the different classroom contexts, but also that it is in these different contexts that the interplay of the contextual configuration and the divergent semiotic resources drawn on manifest the functionality of different repair devices.

By and large, it can be said that the interplay of the various features of the contextual configuration of the different activity frameworks have a bearing on the nature of teacher third turn actions, both in terms of what kinds of projecting devices can be drawn on, i.e. what are the possible resources that display interactional meaning potential in a particular interactional position, and also in terms of what kinds of realization the repair work is to take, i.e. what is the design of the repair action and the repair trajectory. Because teacher third turn repair actions are highly contingent on the different features and their configuration, the practices described in the present chapter cannot be thought of in general terms as they are specific realizations of particular types of contextual configurations of particular classroom activities. Dalton-Puffer (2007) in her study on CLIL classroom repair points out that in different classroom activities repair does not occur with the same frequency. In my data, the repair practices in different activities also take diverging forms. Consequently, not many teacher third turn repair actions take the same shape

when they are viewed from a multisemiotic perspective, although in different sequential positions throughout the present data they manifest certain shared characteristics. These include, for instance, teachers continued embodied orientations or gaze shifts to the pedagogical artefacts in use or towards the class either throughout or at some point during the third turn action space.

The present analysis has sought to show how important it is to take into consideration all the interactional resources participants employ in constructing and organizing their repair actions in and through the interactional organization of the IRE sequence. The analysis demonstrates that each teacher third turn repair action is shaped to fit the emerging interaction and the overall contextual configuration. In this connection, I hope I have succeeded in conveying the contingency and interactional sensitiveness of the design of teacher repair practices in classroom interaction that Seedhouse (2007b) and Lee (2007) have drawn attention to.

7 DISCUSSION

The present study has explored the multisemiotic construction of teacher turn-allocation and repair actions in EFL and CLIL classroom interaction. The analysis has primarily focused on the description of the different semiotic resources, particularly the embodied and material actions, that teachers draw on in performing the two interactional and pedagogical tasks. The role of other semiotic resources, such as talk, paralinguistic features and the use of space, have also been raised and discussed. By adopting a multisemiotic perspective on describing teacher turn-allocation and repair practices, the present study set out to uncover the complex, dynamic and contingent interactional work both teachers and students carry out in the joint accomplishment of instructional interaction. It also set out to explore how the use of different semiotic resources influences the interactional organization of the tripartite instructional sequence of IRE. Whereas previous classroom research has, broadly speaking, examined the nature and construction of the IRE sequence in terms of what the different parts of the instructional sequence accomplish and how through talk, the present study has attempted to look at what lies beyond the talk itself. What does a shift in focus reveal about the IRE sequence and its structure? How are the interactional and pedagogical tasks of turn-allocation and repair accomplished when viewed as turns-of-action instead of turns-at-talk?

In this chapter, I will first briefly present the primary findings of the study and then discuss them from the point of view of the interactional organization of the IRE sequence. A review of the terminological contribution of the study to the field of CA is also provided. I will begin with the terminological discussion (section 7.1), after which I will summarize how teachers employ different semiotic resources in shaping their turn-allocations and repair actions (section 7.2). Once I have done this, I will take the discussion a step further into the sequential organization of classroom interaction and review what kinds of phenomena the analysis has brought to light in terms of its structural properties (section 7.3). Simultaneously, some of the empirical findings are described in more detail, the aim being to provide a more multifaceted account of the findings. The discussion of the implications of the study for the fields of

classroom interaction research and multimodal interaction research is included in the last two sections.

7.1 Terminological contributions

In the course of the study, I have proposed the addition of three new terms into the theoretical and methodological framework of CA that help capture the core essence of the interactional phenomena under analysis. The three terms are in the order of their introduction: turn-of-action, embodied allocation and third turn action opportunity space.

The first term, *turn-of-action*, is, in my view, a long-awaited terminological development that captures the multisemiotic character of interactants' social actions. It basically originates from the core phenomenon that CA research addresses: the construction of the social actions people perform in carrying out their daily interactional activities. More importantly, the term addresses the fact that people's social actions are sequentially organized interactional tasks that moment-by-moment, turn-by-turn form larger activities. It also underscores how actions can be performed through a variety of action constructs that are performed through the use of different semiotic resources. As such, action constructs can consist of talk alone, of embodied actions alone or of a combination of the two together with material resources in different degrees. Consequently, as a term, turn-of-action does not emphasize talk, or linguistic TCUs, over other potential action constructional elements (see Klippi 2006). Rather it views all the elements that participants reflexively make relevant and orient to as crucial in the accomplishment, design and interpretation of their actions.

The second term, *embodied allocation*, in contrast, manifests the primacy of embodied resources in the accomplishment of social actions. In this study, teachers have been shown to allocate turns to students by performing head nods or pointing gestures together with gaze directed towards the addressed recipient. Such turn-allocations can include the use of discourse particles or different types of vocalizations, but other verbal means are rare. Thus, the allocations are almost exclusively produced through embodied means. The basis of the term lies in Olsher's (2003, 2005) 'embodied completions' that refer to turns which speakers began to produce verbally but which were completed through the use of embodied actions.

The third term, the *third turn action opportunity space*, is fundamentally a combination of two previous CA terms and their underlying conceptions of the phenomena they address. These are the 'repair initiation opportunity space' by Schegloff et al. (1977) and the 'projection space' by Schegloff (1984). The former refers to the different sequential positions in which repair can be initiated after the production of the trouble source, whereas the latter pertains to the projection space embodied actions can be said to instantiate before their actual

verbal counterparts are produced. My term captures the fact that teachers characteristically initiate or perform repair in the third turn of the IRE sequence, the evaluation. However, they have means to project through embodied and material means already during the second turn, the student response, that their next action, the evaluation, is to be dispreferred, thereby heralding that repair is in the making. I argue, therefore, that there are different sequential positions within the IRE sequence where teachers can project through a variety of semiotic means that their next action is a repair action. The sequential positions are adjacent, and the first position, the left boundary of the action space (cf. Schegloff 1997a), is the student second turn response, after it has been begun and the target item has been produced. This is followed by other potential interactional positions where repair can be projected to take place but does not necessarily have to.

In the construction of the different terms I have tried to follow the path laid by previous CA studies and their terminological world so as not to confuse the theoretical and methodological framework of CA with terminological developments from other theoretical fields. All three terms are a product of the present study and its analytical focus. Additionally, the terms need further refinement, as there are some problems in their use even within this study. For instance, is it possible to use the term turn-of-action for two synchronously performed social actions accomplished through different modalities, talk and embodiment? Can the two actions be referred to as turns-of-action, when they are not sequentially organized, but are performed in overlapping fashion? Nevertheless, I have coined these terms because they suit the present study and essentially capture the phenomena observed and analyzed. Hopefully, they will be useful for other CA and multimodal researchers in their efforts to uncover how people accomplish their situated social and cultural discourse practices.

7.2 Teachers' multisemiotic practices in classroom interaction

The empirical investigation of the two interactional organizations primarily focused on in the present study – the organization of turn-taking and the organization of repair – has shown how their context-free character is locally adapted and harnessed by the participants in context-sensitive ways thereby creating the institutional interaction of classrooms and accomplishing the institutional task at hand. The participants have been observed to design their interactional contributions in context-sensitive ways at the micro level of interaction, while simultaneously drawing on the structural properties of interaction in context-free ways (e.g. Seedhouse 2004; Sacks et al. 1974). The present analysis has revealed the multisemiotic turn-allocation and projective repair devices teachers can potentially deploy in guiding students' actions and participation in the classroom, and how these have implications for the sequential organization of interaction.

7.2.1 Embodied resources in teacher turn-allocations and their institutional character

Within the turn-taking machinery, the teacher turn-allocations have been shown to take different forms. The embodied actions described in association with the teacher turn-allocations centred on the use of gaze, head nods and pointing gestures, whereas the primary verbal form was the address term, the selected student's name. The analysis shows that all three embodied resources can be used in combination with address terms to nominate next speakers. However, teachers employ more gaze-related verbal turn-allocations than allocations constructed through head nods or pointing gestures. In addition to using address terms, teachers allocate turns to next speakers by inviting responses from them or commanding them to respond. Such verbal constructs are performed in particular when the students were not prepared to answer, and thus they were not bidding for a turn. In such instances, teachers need to do more interactional work to solicit response turns from the students than merely uttering the selected student's name. The analysis has revealed that teachers design these kinds of turn-allocations in interactionally sensitive ways, taking into consideration the kind of participation frameworks that have been established prior to the turn-allocation and the nature of the sought-for responses, i.e. whether the students are assumed to know the answer or not?

The findings also reveal that the role of gaze in the different types of verbal turn-allocation constructs is not as significant as it is in embodied allocations. In general, in all types of turn-allocations, the teacher's gaze towards the class is an essential prerequisite for teachers to be able to select next speakers, but it is not necessary during the allocation of turns. Moreover, the present findings demonstrate that the students' gaze towards the teacher is not a prerequisite at any point during verbally produced turn-allocations. Prior studies, in contrast, have shown that students direct their gaze towards teachers when next speakers are selected and nominated (e.g. Sahlström 1999; Mortensen under review). The present findings highlight that the students' attention can legitimately be directed towards their books before and during the turn-allocation procedure. By keeping their gaze directed at their learning materials, the bidding students display their orientation to parallel activities such as looking for a correct answer in the book. Nevertheless, potential next speakers need to show that they are available and willing to be next speakers through, for instance, bidding for a turn by raising their hand. Because the participants do not necessarily establish mutual gaze during verbally performed turn-allocations, in most cases the verbal part of the teacher turn-of-action is sufficient in accomplishing the interactional task of speaker transfer.

In addition to being used together with address terms, head nods and pointing gestures also function as embodied allocations in their own right. Such turn-allocations are a silent and visual way of allocating turns to next speakers. However, they can be accompanied by different types of vocalizations (e.g. uh or hmm) or discourse particles, but in most cases they are used on their own.

The analysis reveals that embodied allocations are successful in achieving speaker transfer only when the teacher and the addressed recipient establish mutual gaze and the incipient next speaker is bidding for a turn. Both lack of mutual gaze between the teacher and the selected student and the non-bidding status of the selected student occasion repair. When repair is initiated, teachers reconstruct the turn-allocation through the use of various resources: it is generally upgraded so as to include talk. For these reasons, embodied allocations are effective only when the participants have clear visual access to one another, and thus can achieve mutual gaze. Mutual gaze is a prerequisite for embodied allocations to bring off speaker change.

All in all, it can be concluded that different embodied turn-allocation practices manifest the institutional nature of the turn-taking machinery of classroom interaction. At the beginning of the study, I introduced Seedhouse's three-way view of context in classroom interaction (section 1.2.4), and modified it slightly to fit my data. Recall that it includes the three contexts – institutional, language/content classroom and micro contexts – that are reflexively drawn on and constructed in and through classroom interaction. In considering the present findings, the embodied practices brought up through the analysis can be viewed in terms of how they represent the two extremes: the institutional and micro contexts of classroom interaction. As regards the institutional level of interaction, the presence of all three embodied practices (gaze, head nods and pointing gestures) in both classroom settings are evidence that their use is in fact an institutional feature of classroom interaction regardless of the subject content of the lessons. For example, both the EFL teachers and the CLIL biology teacher deploy head nods in their turn-allocations. They therefore demonstrate the homogeneity of teacher turn-allocation practices in classroom interaction. However, not all the turn-allocation constructs analyzed here are used in both settings in a similar manner or in similar quantities. In this respect, the differences in teacher practices reflect the heterogeneity of the ways in which the distinct embodied resources are used at the micro contextual level of interaction: how they are fitted to the ongoing interaction and the sequential positions in which they are produced. Indeed, the analysis has shown how embodied allocations can be and are delivered simultaneously with the teachers' reformulated initiations so that the embodied allocation is produced towards the end of the verbal TCU or just at the TRP. As such, the particular character of embodied allocations as a silent and visual way of allocating turns to next speakers is, on one hand, created and, on the other hand, exploited to the fullest in the local exigencies of the emerging interaction.

7.2.2 Multisemiotic resources in projecting teacher repair actions and their institutional character

The case with teacher repair actions is somewhat different from teacher turn-allocations. The observation of the repair sequences reveals that the semiotic resources teachers employ in projecting their third turn actions as dispreferred are highly dependent on the contextual configuration of the particular

classroom activities in which they are embedded, and their frameworks. In general, activity frameworks consist of such features as the different teaching materials used to mediate the interaction, the nature of the response turns students are to produce for them to be correct (i.e. long vs. short answers) and the kinds of evaluative actions teachers need to perform (i.e. whether they reveal the answers on transparencies or whether they write them on transparencies or on the blackboard, or whether they are to be found in the students' books). In comparison to teacher turn-allocations that are recurrent and highly frequent, teacher projective repair actions are more context-sensitive not only relative to the unfolding interaction and the way it has been shaped, but to the overall contextual configuration of particular activity frameworks.

On the whole, the teachers in my data appear to project their third turn actions as doing repair by withholding the revealing of correct answers, by producing cut-off body movements at the TRP, by continued gaze orientation to either their teaching materials or to students, or by shifting their gaze orientation between the class and the teaching materials. All the different resources, whether embodied, material, paralinguistic or verbal, serve to herald the repair action as dispreferred, therefore mitigating it. The different resources used also create distinct types of repair trajectories in the accomplishment of repair. While the use of transparencies and related gaze orientation lead to teacher-initiated teacher-performed repair (such as the withholding of the revealing of the answer), the use of the other combinations create space for the students to perform the repair. In the latter case, the teachers build diverging third turn action spaces through their embodied and material actions that create different opportunities for the students to perform the repair. Most interestingly, the analysis highlights that teachers do not produce the actual verbal TCUs immediately after the student response turns have come to completion (cf. McHoul 1990). They delay the beginning of the initiation of repair utterances through the use of the different embodied and material resources (see Schegloff 1996). It was only on a couple of occasions that the teachers performed explicitly direct and negative evaluations after the student response turns (see also Seedhouse 2001, 2004).

An important observation made during the repair analysis is that some of the projective devices were already in play already during the student second turn response actions within the IRE sequence. That is to say, teachers parse students' responses as these are produced and display their treatment of them simultaneously as the students deliver their responses (cf. Mondada 2007). This is particularly the case when the answers are long. The student response and the teacher projective action are in such instances partially simultaneously performed by the participants. But, whereas the students produce their response turns through talk, the teachers perform the projection of their dispreferred next actions through embodied and material means. This was shown to be the case with positive evaluations as well, with preferred third turn actions.

It is the interplay amongst the different features of the contextual configuration that reveal the institutionality of teacher repair practices and their

recurrent and habitual manifestation, albeit in distinct realizations, in the participants' actions. Here we once again enter Seedhouse's (2004) three-way view of context, and my own adaptation of it. The various projective devices teachers draw on represent the different potential resources available for them within the larger framework of classroom interaction: the institutional character of the interactional organization of repair. Because of the rather limited data on repair sequences, it is likely that there are other projective devices teachers can employ depending on the activity framework in question. To describe other potential devices requires a larger study on teachers' multisemiotic repair practices. On the micro-contextual level, the projective devices observed are drawn on in numerous ways that are, as pointed out above, locally contingent on the contextual configuration of the current activity framework. Thus, they are uniquely designed realizations of teacher third turn prefacing actions. In other words, there is a certain amount of homogeneity between the resources used, as they are employed in similar ways by both EFL teachers and a CLIL biology teacher, and a certain amount of heterogeneity, as each singular repair action, and projective devices in particular, are designed to fit the ongoing interactional organization of the IRE sequence.

The classroom activities focused on in this study primarily bear a resemblance to the form-and-accuracy context of L2 classrooms in that in both EFL and CLIL lessons the teachers have been looking for specific target responses, whether these relate to linguistic forms or content. However, it is hoped that, the analysis has clarified that within this particular classroom context, the organization and accomplishment of repair takes a variety of forms depending on the contextual configuration of the activity frameworks. Consequently, representations of distinctly designed projective repair actions occur, which nevertheless exhibit a certain degree of sameness within activities exhibiting a similar type of a contextual configuration. For instance, in activities where the teachers either reveal the correct answers on a transparency or where they write their answer on a transparency or on the blackboard, the teachers' embodied actions are convergent. The withholding of the revealing of the answer on the transparency, the cut-off body movement or the motionless body posture are all manifestations of particular types of contextual configurations, and attain their interactional meaning potential within particular activity frameworks. Moreover, all three teacher practices have been shown to be orderly and shaped not only by the talk that has occurred but by the overall contextual configuration. These practices further shape the emerging repair trajectories enacted for the accomplishment of repair. Whether the embodied forms exhibit the teachers' idiosyncratic practices it is difficult to say as each activity in the data is constructed in a particular way, and thus no two activities are completely alike. Consequently, the projective practices described are singular manifestations of particular activities of particular teachers. More data from several teachers would be needed in order to be able to argue that the projective practices observed here are characteristic representations of classroom interaction in general. The qualitative description has thus served to illuminate the kinds of multisemiotic resources teachers draw on in

constructing their repair actions, and to reveal the sequential organization of the practices through single case instances.

7.2.3 Intersubjectivity in and directionality of the participants' turns-of-action

The empirical findings of the turn-allocation and projective repair practices have revealed that neither the embodied turn-allocation devices nor the projective devices are randomly produced bodily actions by the teachers. Rather they are purposefully designed to be intersubjective. They gain their meaning and interactional import from the sequential position in which they are performed. What is more, they are oriented to by the participants, and particularly by the students, as accomplishing the interactional task of the current action. However, this is more transparent in the turn-allocation analysis as there the students were shown to produce the relevant next actions after the teacher turn-allocations, whatever form these took. The repair analysis has perhaps not indicated quite as clearly that the students treat the teachers' embodied and material actions interactionally relevant per se, but it has shown how they respond to the teacher actions as whole turns-of-action, of which the embodied and material resources are an essential part (see Goodwin 1986; Streeck 1994). In this respect, some of the embodied actions play more of a complementary role in the teacher turns-of-action in relation to the meanings produced through them. This is especially the case where students do not see the different embodied resources, such as when their gaze is directed towards pedagogical artefacts instead of towards the teacher. But in other instances, the use of embodied resources can be significant. For instance, when the teacher and the selected student establish mutual gaze during an address term turn-allocation, the teacher's gaze is crucial in helping to create a primary framework with the addressed recipient, thereby making it clear that the gazed-at student is the recipient of the teacher action. In contrast, the address term in such instances makes the turn-allocation explicit to the whole class. In this respect, embodied actions seem to have different levels of interactional import that depend on whether or not they are seen and oriented to by their recipients.

More importantly, the findings illuminate the dynamic nature of classroom interaction by bringing to light how teachers and students continuously orient to the use of the IRE sequence as an instructional tool and its structural properties in classroom interaction. That is, as each new IRE sequence is initiated by the teacher, the participants display their orientation to both their present and forthcoming actions (see also Dausendschön-Gay & Kraft 2009). First of all, students orient to the fact that they need to bid in order to get a turn, and secondly, they orient to providing the potential correct response in the event they are given an opportunity to reply. For instance, they direct their gaze towards their books in order to find the correct answers there during the turn-allocation procedure. They also anticipate the forthcoming evaluation to be performed by the teachers and display their expectation of its emergence through different means, for instance, by shifting their gaze towards the teacher at the end of their responsive TCUs. Teachers, on the other hand, orient to the

task of allocating next-turns to students when they initiate IRE sequences by directing their gaze towards the class. They also prepare for the forthcoming evaluation they are to perform during the turn-allocation. This was particularly shown to be the case when teachers already during the turn-allocation, or just prior or after it, were already shifting their gaze towards the teaching materials, which function as mediators in the interaction. During student response turns, teachers analyse the response as it is produced, and simultaneously display how they are going to perform the third turn action. For these reasons, at all levels of the IRE sequence, the participants are shown to both carry out present actions as well as to prepare for their possible next actions. In some ways there is an awareness of forward directionality in the participants' turns-of-action in a similar way as there has been shown to be a sense of directionality in relation to TCUs and their incremental production (see Schegloff 1996: 100). The simultaneous awareness of and orientation by the participants not only to parallel actions but also to future actions is reflected in the way the IRE sequence is structured sequentially. How it is affected will be discussed briefly.

7.2.4 Implications for classroom interaction research

The findings of the present study have demonstrated the multifaceted nature of classroom interaction by describing how the multisemiotic construction of teacher turn-allocation and repair practices influences its sequential organization. The most significant contribution of the findings is that they help portray the highly "creative and transformable nature of classroom discourse" (He 2004: 575). This applies particularly to how interaction is contingently built to reflect the divergent contextual configurations of particular activity frameworks. The study has thus shed light on how classroom interaction varies and is shaped by a variety of factors, not only by the different classroom talks (Markee & Kasper 2004) and classroom contexts (Seedhouse 2004), but also by the interplay of the nature and role of the mediating pedagogical artefacts and the shape teacher and student turns-of-action acquire in the local exigencies of the IRE sequence. There is dynamic reflexivity both relative to the turn-taking organization in how the IRE sequence is constructed after or during the teacher initiation and also relative to the repair organization in who gets to perform repair and through what kind of a repair trajectory.

The findings have also shed light on the co-constructed nature of teacher and student participant roles. The particular focus on teacher practices in the present study has accentuated the teacher's role as the representative of the institution and the manager of social order. That is, the findings clearly reveal that teachers embody the institutional role of managing how interaction develops and who gets to speak and when (also e.g. McHoul 1978; Sahlström 1999). This is especially evident in view of the fact that teachers are able merely through embodied means to allocate turns to next speakers. Yet the analysis has shown that without a shared understanding between the teacher and the students of what is taking place at a particular sequential position and without the temporally sensitive coordination of their actions, teachers' turns-of-action,

whether turn-allocations or repair actions, are not successful. In other words, students' actions, and particularly their orientations, have marked interactional implications for how teachers shape their actions in the accomplishment of their respective interactional and pedagogical tasks.

The findings thus further elaborate previous studies of classroom interaction by revealing how classroom interaction, and particularly the IRE sequence, is not a monolithically constructed organizational apparatus, through which the institutional task of the setting, teaching and learning, is accomplished. More importantly, the findings underscore the importance of looking into the fleeting micro moments of instructional interaction as in this way it is possible to gain a more holistic picture of what actually takes place in the everyday life of classrooms (see also Niemelä 2008; cf. Martin 2004). Such a description also helps raise awareness of how teachers and students set about performing their respective tasks and what kinds of concerns they need to pay heed to in bringing them off. Effectively, the participants' tasks and concerns not only relate to how the interaction is structurally organized, but also to the participants' need to achieve shared understanding of how learning opportunities are co-constructed to students. This is accomplished through the participants' simultaneous orientation to, first of all, how interaction is structured, and secondly, to how the topic and the subject-specific discourse are developed through the emerging interaction (see also Pekarek Doehler and Ziegler 2007; Dalton-Puffer 2007; Niemelä 2008). In terms of learning opportunities, whether of language or content, the findings thus show that they are contingent on the form the participants' interactional practices take within the organizational apparatus of classroom interaction.

Overall, the study corroborates the findings by Mortensen (2009) in that quite a lot of the participants' talk emerges from, but is also constrained by, their embodied and material actions, which in turn are further governed by the pedagogical artefacts in use and their mediating role. As Lazaraton (2004: 111) points out "classroom input is *not* merely composed of teacher or other learner talk: Classrooms are the locus of embodied practice." This is nicely highlighted in the present findings as even the basic interactional organization is shown to be carried out through both talk and embodiment.

7.3 The sequential organization of the IRE sequence from a multisemiotic perspective

The analysis on teacher turn-allocation and repair practices performed in this study has made explicit the dynamic nature of the IRE sequence and its reflexive use in classroom activities. Several researchers have shown how the organization of the IRE sequence is more flexible and complex than has previously been claimed. It is not always used in lockstep fashion; rather, it is constructed differently in different classroom contexts (see e.g. Seedhouse 2004;

Hellermann 2003, 2005). While these studies have focused on talk and prosodic features and how they are used in constructing the different actions of the instructional sequence, the present study has highlighted the dynamic nature of the use of the IRE sequence from a multisemiotic point of view, thus revealing another order for the structuring of the sequence.

One of the essential findings of the present study is that quite often teachers and students perform their respective participant actions in either partial or complete overlap with one another. These overlapping actions can be related to either the management of the turn-taking organization or the repair organization: which ever of the two is in operation, the participants' actions have a bearing on the interactional organization of the IRE sequence. Below, I will first give an account of the different forms in which the sequence is organized in relation to turn-taking, after which I briefly report on repair actions and their role. At the end of the section, I reflect on the overall sequential organization of interaction and suggest that the multisemiotic construction of the instructional sequence of IRE in the institutional setting of classrooms is an interactional site for beginning to understand how the participants organise their turns-of-action and not only their turns-at-talk.

7.3.1 The interactional organization of turn-allocations

At the beginning of chapter 5 I introduced the prototypical IRE sequence, through which quite a few of the classroom activities within the data are constructed. The introduction demonstrated the different sequentially relevant, contingently unfolding actions that can occur within the sequence, including the insertion sequence of the adjacency pair 'student bidding–teacher turn-allocation'. The insertion sequence has been shown to be an essential feature of the IRE sequence, as without its presence there would be no means of telling who is to produce the student second turn response action. In the majority of the turn-allocations, the insertion sequence is enacted as an activity sequence in its own right. Therefore, when it is performed in its prototypical sequential position, after the initiation, it constitutes a primary activity sequence, the successful enactment of which teachers and students negotiate jointly.

However, the analysis has also shown that the insertion sequence can also occasionally be performed as an ancillary, yet essential, activity produced simultaneously with either teacher initiations or evaluations. When it is produced in overlap with the initiation or the evaluation, it is carried out completely through embodied actions, as both the student bidding (the hand-raising) and the turn-allocation procedures are silent and visual actions. When the insertion sequence is accomplished concurrently with the initiation, it does not figure in the sequential organization of the IRE as a separate activity sequence. The possibility to perform the insertion sequence in such a manner reveals another aspect of the flexibility of the IRE sequence not discussed in previous studies.

From another perspective, it could be said that the shape of the teacher turn-allocations in the IRE sequence varies according to the sequential location

in which they are delivered. That is, teachers design their turn-allocations to reflect the ongoing interaction in terms of what kinds of uses of different resources the different constructions afford or constrain. When the insertion sequence 'student bidding–teacher turn-allocation' is enacted as a separate activity sequence, the turn-allocations are constructed through the use of address terms and gaze, through invitations and commands to respond, through head nods and gaze, through pointing gestures and gaze, or through a combination of these. In contrast, when the turn-allocations are issued as turns-of-action simultaneously with the teacher initiations or evaluations, they are performed entirely through embodied means.

In sum, the findings foreground the importance of the possibility the participants have to harness the turn-allocation machinery to meet the participants' emerging needs, thereby being locally adapted to accomplish the organization of turn-taking in classroom interaction as effectively as possible (see Sacks et al. 1974). What they also reveal is that there clearly is a specific form of interaction economy at work (Sacks et al. 1974; Sahlström 1999) in the organization of classroom turn-taking. This interaction economy can be employed in the service of bringing off the instructional sequence, and thereby of accomplishing the institutional task of teaching and learning through the dynamically constructed IRE sequence.

7.3.2 The interactional organization of repair actions

The analysis of the teacher repair actions has shown that teachers either initiate or perform repair in the third turn action space of the IRE sequence. Moreover, the findings underscore how teachers shape their dispreferred next actions so as to anticipate the treatment of the student answer already when the latter is being produced. In other words, teachers sometimes begin to produce their third turn actions partially in overlap with the student second turn responses. The participants thus perform their respective interactional and pedagogical tasks in part simultaneously. The simultaneity of their actions is rendered possible through the use of the two modalities, talk and embodiment. This has consequences for how the different actions within IRE sequence not only are contingently produced, but also coordinated in parallel manner (see Jordan & Henderson 1995). Thus, the simultaneous construction of the participants' turns-of-action also highlights their constant awareness and ongoing orientation towards not only what is taking place at the moment, but also what is to take place next. Dausendschön-Gay and Krafft (2009: 264) suggest that in every "routine sequence, each activity can be interpreted as both the performing of whatever it is that needs to be done and as preparation of what is due to follow. In other words, any activity that is part of the routine at the same time prepares for the next step." They have furthermore shown that "preparation is a constitutive part of the organization of joint action" (Dausendschön-Gay & Krafft 2009: 266). The present empirical observations of teacher repair practices thus illustrate the coordinated nature of the actions teachers and students produce in and through the IRE sequence.

Viewed in this light, the use of the IRE sequence in classroom interaction can be said to be a routine interactional organization through which the work of teaching and learning is achieved. More importantly, the findings underline the importance of the endogenous role of repair in instructional interaction within the IRE sequence (Schegloff et al. 2002; Macbeth 2004; Hall 2007; Dalton-Puffer 2007). Precisely because the participants exhibit constant awareness of their conditionally relevant next actions, the role repair plays in instructional interaction is shown to be tightly woven into the accomplishment of teaching and learning through interaction. More importantly, because the teachers' projective devices rely on the use of the pedagogical artefacts and their mediating role in the interaction as well as manifest the different potential resources that teachers are able to draw on in particular contextual configurations, repair can be said to be a highly endogenous practice in instructional interaction. It is not treated by the participants as a side sequence; rather the IRE sequence is utilized as an interactional tool to accomplish teaching and learning. The description of teacher repair practices has thus revealed the local exigencies of the organization of repair within the contextual configuration of particular activity frameworks, not to mention the embeddedness of the repair practices within the IRE sequence (see also Lee 2007).

7.3.3 Implications for the field of multimodal interaction research

By and large, prior research on talk and embodiment has not specifically addressed the role of interactants' embodied actions in the production of their simultaneous social actions, although some researchers have briefly touched upon this (e.g. Goodwin 1986; Heath 1992; Schegloff 1996; Sahlström 1999). In more recent work, however, researchers have begun explicitly to describe the overlapping and simultaneous construction and coordination of interactants' actions, and their interactionally sensitive performance through the use of various embodied and material means (e.g. Tykkyläinen 2005; Mondada 2007; Haddington & Keisanen 2009; Haddington forthcoming). There is thus a growing body of research that addresses the relevance participants' overlapping actions have for the sequential organization of talk-in-interaction: how do participants actually organize and coordinate their actions when these are viewed from a multisemiotic perspective? However, as Schegloff (2007: 11) points out, "there is not yet a broad framework for capturing in the participants' terms the sequential organization that orders the courses of [bodily] action of single partic-ipants, let alone the coordinated conduct of several." He further states that "no reliable empirical basis for treating physically realized actions as being in principle organized in adjacency pair terms" exists (ibid.). Before such a broad framework can be developed, a good deal of research is needed across a variety of interactional settings that covers the ways in which interactants organize their interactional, situated practices in the accomplishment of whatever social activity is at hand.

In my view, the present study offers a starting point for the systematic description of how interactants organize their turns-of-action in terms of adjacency pairs in the classroom, regardless of their shape. That teachers and students construct their instructionally relevant turns-of-action both solely through embodied means and through the interplay of talk and embodiment reveals their orientation to the conditional relevance of the reciprocal actions they perform in the organization of interaction. In this respect, the findings have effectively laid bare the distinct types of sequential constructs of the adjacency pair 'student bidding–teacher turn-allocation' that the participants perform and orient to as legitimate ways of organizing and negotiating turn-taking. It has also shown the overlapping nature of the adjacency pair 'student response–teacher evaluation', and the divergent ways in which it can be realized in and through the IRE sequence.

What, then, does the sequential organization of the IRE look like when participants' actions overlap? I will give a brief example by describing how participants' parallel actions influence the organization of turn-taking, as this is somewhat more straightforward in its different realizations – both in its separate and synchronous realizations – than the organization of repair. In general, the first-pair part of the adjacency pair, the students' bid, is always conducted through an embodied action, the raising of hands, and in some cases this is accompanied by a gaze-shift towards the teacher. Hand-raising is not only a legitimate, but the preferred way of requesting a turn-at-talk in the multiparty setting of classrooms (Sahlström 1999), and teachers treat student hand-raises as accomplishing the interactional task of bidding for a response turn. It generally takes place either during the teacher initiation or immediately after it. The second-pair part, the teacher turn-allocation, in contrast, has been shown to be performed through talk, a combination of talk and embodiment or through wholly embodied means. Students interpret all three action constructs as legitimate ways of enacting the interactional task of allocating next-turns to students. As has been shown, the adjacency pair can be accomplished as a primary activity in the form of an insertion sequence within the IRE sequence, or it can be accomplished in overlap with the initiation in two ways. First, it can be performed so that students bid simultaneously as teachers initiate the IRE sequence, after which the teacher turn-allocation is produced as a solitary second-pair part either through talk or through embodied means only. Second, the adjacency pair can be carried out simultaneously during the teacher initiation, in which case it is an ancillary, but yet an essential activity, accomplished through embodied means only.

Embodied actions can thus function both as first-pair parts and as second-pair parts, and they are understood as accomplishing whatever interactional task they are meant to accomplish through their sequential position in the ongoing interaction. In this case the ongoing interaction has been the larger activity sequence of the IRE. Consequently, the particular focus on the instructional sequence of IRE in the institutional context of classroom interaction has served to explicate how particular types of adjacency pairs, i.e. student bidding–teacher turn-allocation or student response–teacher evaluation,

can be realized in terms of the participants' bodily actions. To me, it seems that by describing how, in particular in institutional situations, participants recurrently and systematically draw on the different types of adjacency pair combinations in the service of accomplishing the institutional task at hand is a starting point for understanding how bodily actions figure in the sequential organization of interaction. Once the recurrent practices characteristic to different institutional contexts have been explored, it will be possible to begin investigating the potential sequential constructs of everyday encounters in which adjacency in the form of embodiment comes into play.

YHTEENVETO

OPETTAJAN VUORONANTO- JA KORJAUSKÄYTÄNTEET LUOKKAHUONEVUOROVAIKUTUKSESSA: MULTISEMIOOTTINEN NÄKÖKULMA

Tämä tutkimus tarkastelee luokkahuonevuorovaikutusta ja kahta vuorovaikutuksen perusjäsennystä: vuorottelu- ja korjausjäsennystä. Tutkimukseni keskittyy kuvaamaan opettajan vuoronantoja ja korjauskäytänteitä multisemioottisesta näkökulmasta. Keskiössä ovat erityisesti opettajan kehollinen vuorovaikutus ja erilaisten opetusmateriaalien ja -välineiden rooli. Tutkimuksessa tarkastellaan sitä, miten tällainen ei-kielellinen toiminta nivoutuu puheeseen ja miten sillä luodaan merkityksiä ja tulkintoja luokkahuoneen institutionaalisessa vuorovaikutuksessa. Erityisesti tutkitaan sitä, miten opettajat käyttävät erilaisia semioottisia vuorovaikutuskeinoja kahdessa toiminnassa, nimittäin jakaessaan puheenvuoroja oppilaille ja ennakoidessaan sitä, että tulossa on korjaussekvenssi. Oppilaiden toiminta nousee analyysissa keskeiseksi, sillä kaikki osallistujat vaikuttavat siihen, miten vuorovaikutus rakentuu. Olennaista on lisäksi se, millainen opetustilanne, aktiviteetti, on meneillään ja millaisia opetusvälineitä ja -materiaaleja tilanteessa hyödynnetään.

Tutkimukseni on luonteeltaan kuvaileva ja laadullinen, mikrotason ilmiöihin keskittyvä syväluotaus luokkahuonevuorovaikutukseen, ja sen jäsentymiseen. Tutkimusmenetelmänä on käytetty keskustelunanalyysia yhdistettynä Charles Goodwinin (2000a, 2003) näkemykseen vuorovaikutuksen multimodaalisesta ja dynaamisesta tilanteisuudesta. Näkemyksessä painottuu sosiaalisen toiminnan sidoksisuus vuorovaikutustilanteeseen: erilaiset vuorovaikutustoiminnot saavat paikallisen merkityksensä useiden semioottisten järjestelmien välityksellä osallistujien yhteistoiminnan ja -ymmärryksen pohjalta. Keskustelunanalyysissa puolestaan korostetaan sitä, että sosiaalinen vuorovaikutus jäsennetään vuoro vuorolta ja että osallistujat osoittavat omalla toiminnallaan ymmärryksensä siitä, mitä on tapahtumassa.

Tutkimusmateriaalini koostuu videoiduista oppitunneista, joista 12 on lukion englannin kielen oppitunteja (EFL, English-as-foreign-language) ja 12 yläkoulun englanninkielisen aineenopetuksen oppitunteja (CLIL, Content-and-language-integrated-learning; kuusi 9. luokan biologian, kuusi 7. luokan fysiikan tuntia). Analyysin kohteeksi valikoituivat sellaiset vuoronanto- ja korjaussekvenssit, jotka esiintyvät opettajajohtoisissa, kolmiosaisen opetussyklin kautta rakentuvissa luokkahuoneaktiviteeteissa. Tällaisia aktiviteetteja olivat muun muassa erilaiset tehtävien tekemiseen ja tarkistamiseen liittyvät jaksot sekä opetuspuheen kyselyjaksot esimerkiksi kieliopin opettamisen aikana englannin tunneilla ja uuden teoreettisen asian

opettamisen aikana biologian tunneilla. Varsinainen tutkimusaineisto koostuu näin ollen 376 opettajan vuoronannosta ja 34 korjaussekvenssistä.

Aikaisempi luokkahuonetutkimus on osoittanut, että luokkahuonevuorovaikutus rakentuu pitkälti kolmiosaisen vuorovaikutusrakenteen eli aloite–reaktio–palaute-opetussyklin (englanniksi Initiation-Response-Evaluation, IRE) varaan (esim. Tainio 2007, Mehan 1979). Sykli alkaa opettajan aloitteella, jota seuraa oppilaan vastaus, jonka opettaja puolestaan arvioi kolmannessa vuorossaan. Kun oppilaan vastaus on odotuksenmukainen, opettaja tuottaa positiivisen arvion ja sulkee opetussyklin. Kun oppilaan vastaus on odotuksenvastainen, opettaja tekee korjausaloitteen, jonka avulla hän joko korjaa oppilaan vastauksen itse tai etsii oppilaiden joukosta uuden vastaajan ja vastausehdotuksen. Tutkimukseni kuvailee sitä, mitä tapahtuu kolmiosaisen opetussyklin päävuorojen välissä: miten opettajat jakavat puheenvuoroja oppilaille ennen toisen position vastausvuoroa ja millä keinoin he osoittavat oppilaiden vastauksen olevan väärin ennen kuin tuottavat kolmannen vuoron palautteen. Kun aikaisempi tutkimus on keskittynyt kuvaamaan opetussykliä melko karkeasti rakentuvaksi, tämä tutkimus osoittaa, miten se muotoutuu dynaamisesti vuorovaikutuksen edetessä ja saa vaihtelevia muotoja eri sekventiaalisissa vuorovaikutuskonteksteissa. Lisäksi saadaan uutta tietoa luokkahuonevuorovaikutuksen vuorottelujäsennyksen ja korjausjäsennyksen multimodaalisesta luonteesta.

Aiempi luokkahuonevuorovaikutuksen tutkimus on osoittanut, että opettajat tyypillisesti antavat vuoron seuraavalle puhujalle nimeämällä tämän ja suuntaamalla katseen tähän (mm. McHoul 1978, Mehan 1979, van Lier 1994, Hall 1998, Niemelä 2008, Mortensen under review). Opettajan vuoronannoissaan käyttämiä kehollisia vuorovaikutuskeinoja, sellaisia kuin pään nyökkäämistä tai osoittavia eleitä, on toistaiseksi tutkittu vähän (ks. kuitenkin Mehan 1979, Mortensen under review). Tutkimukseni osoittaa kuitenkin, että opettajan vuoronannot voivat koostua sekä kielellisistä että ei-kielellisistä elementeistä. Ne voivat sisältää pelkästään oppilaan nimen tai oppilaan nimen ja väitelauseen tai kysymyksen. Nyökkäykset ja osoittavat eleet voivat esiintyä joko yhdessä oppilaan nimen tai erilaisten diskurssipartikkelien tai äännähdysten kanssa tai yksinään yhdessä opettajan katseen kanssa ns. kehollisina vuoronantoina (embodied allocation).

Analyysini paljastaa, että opettajan katse ja sen siirtäminen ovat keskeisiä keinoja valita tai nimetä seuraava puhuja. Se, että opettajan katse kohdistuu luokkaan seuraavan puhujan valitsemisvaiheessa, on olennainen edellytys onnistuneelle vuoronannolle. Opettajan ei kuitenkaan välttämättä tarvitse katsoa luokkaan vuoronannon aikana, jos tämä on tuotettu kielellisesti tai kielellisen ja ei-kielellisen toiminnan yhteiskonstruktiona. Jos vuoronanto koostuu sekä kielellisestä muodosta että ei-kielellisestä toiminnasta tai vain pelkästä kielellisestä osasta, ei ole väliä, katsooko oppilas opettajaan: vuoronanto onnistuu useimmissa tapauksissa ilman oppilaan katsettakin, jos oppilas viittaa. Mutta jos opettaja antaa vuoron pelkällä nyökkäyksellä tai osoittavalla eleellä, onnistuneen vuoronannon edellytyksenä on se, että molemmat osapuolet katsovat toisiaan ja että oppilas viittaa. Jos oppilas ei katso

tällaisen vuoronannon aikana opettajaan, vuoronanto epäonnistuu, ja opettaja joutuu korjaamaan vuoronantoansa niin, että se kutsuu oppilaan huomion ja katseen. Tämä tapahtuu esimerkiksi siten, että opettaja vuoronannossaan sekä sanoo oppilaan nimen että käyttää kehollisia resursseja. Analyysini osoittaa erityisesti, että opettajat hyödyntävät kehollisia vuoronantoja samanaikaisesti esimerkiksi silloin kun he evaluoivat oppilaan väärää vastausta. Tällöin nämä kaksi eri vuorovaikutustoimintoa – oppilaan vastauksen arviointi ja vuoronanto – toteutetaan eri semioottisilla keinoilla: arviointi rakennetaan kielellisesti, kun taas vuoro annetaan joko nyökkäämällä tai osoittamalla. Tulokset osoittavat siis, että opettaja on laajasti tietoinen luokkansa toiminnasta, esimerkiksi siitä, kuka viittaa ja milloin.

Korjausjäsennyksen osalta tutkimukseni osoittaa, että myös opettajan korjauskäytänteet ja korjausvuorojen rakenne ovat nivoutuneet sekä meneillään olevan aktiviteetin toimintakehykseen että aktiviteetissa hyödynnettyjen opetusmateriaalien (kirjat, kalvot) ja -välineiden (liitutaulu, piirtoheitin) asemaan vuorovaikutuksen välittäjinä. Eri välineitä ja materiaaleja käytettäessä vuorovaikutus rakentuu moniulotteisemmaksi sekä sekventiaalisesti että vuoron rakenteen tasolla, kuin aiemmat opettajan korjauskäytänteitä kartoittaneet tutkimukset ovat osoittaneet (vrt. Seedhouse 2004, Macbeth 2004, Jung 1999, McHoul 1990).

Tutkimukseni näyttää, että opettajan voivat toisinaan jo vuoronannon aikana, nimetessään seuraavan puhujan, orientoitua oppilaan tulevaan vastaukseen kääntämällä katseen hänestä opetusmateriaaliin. Katseen kääntäminen projisoi vastauksen arviointia ja on osoitus opettajan oletuksesta, että vastaus on odotuksenmukainen. Jos oppilaan vastaus onkin väärä – odotuksenvastainen – opettaja joko korjaa vastauksen tai aloittaa korjaussekvenssin. Opettajat voivat myös muissa sekventiaalisissa konteksteissa projisoida toiminnallaan korjausta. Tämä tehdään hyödyntäen eri semioottisia keinoja eri sekventiaalisissa konteksteissa. Ensinnäkin opettajan kehollinen toiminta voi ennakoida jo opetussyklin toisen vuoron, oppilaan vastausvuoron, aikana oppilaan vuoroa seuraavaa korjausta/korjaussekvenssiä. Opettajat esimerkiksi viivyttävät oikean vastauksen paljastamista kalvolta tai sen kirjoittamista kalvolle/taululle, kunnes oikea vastaus tuotetaan. Toiseksi analyysini näyttää, että oppilaat tulkitsevat korjausaloitteeksi myös opettajan pitkähkön hiljaisuuden syklin kolmannessa positiossa. Tulkintaan vaikuttaa osaltaan se, että tauon aikana opettaja ei liiku, mutta pitää katseensa suunnattuna joko luokkaan tai opetusmateriaaliin. Kolmanneksi opettajat voivat projisoida kehollisella toiminnalla, esimerkiksi asentoa vaihtamalla, tulevaa korjausta jo hieman ennen, kuin he varsinaisesti tuottavat kolmannen position vuoronsa kielellisesti.

Kaiken kaikkiaan tutkimukseni paljastaakin sen, että opettajan korjauskäytänteet ulottuvat sekventiaalisesti paljon laajemmalle kuin vain opetussyklin kolmanteen vuoroon, mikä mahdollistaa opettajan ja oppilaiden toimintojen osittaisen päällekkäisyyden. Voidaankin puhua korjaavan toiminnan mahdollistavista positioista opetussyklin sisällä, siis eräänlaisesta jatkumosta oppilaan toisen position vuorosta aina opettajan kolmanteen

vuoroon ja sen jälkeiseen toimintaan. Meneillään olevan aktiviteetin toimintakehys ja eri opetusmateriaalien ja -välineiden käyttö vaikuttavat siihen, millaiset positiot ovat mahdollisia missäkin tilanteessa. Toisin sanoen se, käytetäänkö vastausten tarkistamisessa taulua vai kalvoa, ja se, ovatko oppilaiden vastaukset pitkiä vai lyhyitä, vaikuttavat siihen, miten opettajat projisoivat tulevan korjaustoiminnan eri kehollisia vuorovaikutuskeinoja käyttäen.

Tutkimukseni tulokset perustuvat analyysihavaintoihin yksittäisten aktiviteettien multisemioottisista käytänteistä. Juuri yksityiskohtainen mikrotason analyysi voikin paljastaa luokkahuonevuorovaikutuksen moniulotteisen ja erittäin hienosyisen luonteen. Tutkimus osoittaa myös, että sekä opettajat että oppilaat luovat yhdessä merkityksiä ja neuvottelevat niistä: he orientoituvat useisiin semioottisiin resursseihin eri aktiviteettikonteksteissa vuorovaikutuksellisesti merkittävinä. Samalla he ovat tietoisia erilaisista pienistäkin toiminnan vivahteista – kielellisistä ja kehollisista, joiden avulla luodaan opetusvuorovaikutusta.

Tulokset näyttävät myös sen, että eri luokkahuoneissa – englannin kielen ja englanninkielisen aineenopetuksen tunneilla – opettajat hyödyntävät samantapaisia vuoronanto- ja korjauskäytänteitä. Vaikka paikallisesti, sekventiaalisissa konteksteissaan opettajan vuoronannot ja korjaukset siis saavat vaihtelevia muotoja, luokkahuoneen institutionaalinen tilanne mahdollistaa kuitenkin hyvin samanlaisten semioottisten vuorovaikutuskeinojen hyödyntämisen, riippumatta opetettavasta aineesta tai opetuksen kielestä. Toisin sanoen esimerkiksi suomenkieliset osallistujat rakentavat toimintansa ja tulkintansa englanninkielisessä opetuksessa hyödyntäen samoja keinoja kuin äidinkielisessä vuorovaikutuksessakin. Tulokset osoittavat myös, että luokkahuoneissa osallistujat orientoituvat toiminnan jäsentämiseen sekä kielellisen että ei-kielellisen toiminnan kautta samanaikaisesti (vrt. Pekarek Doehler & Ziegler 2007, Seedhouse 2007).

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APPENDIX 1: Transcription conventions

The transcription conventions are adjusted from Gail Jefferson (ix – xvi, Atkinson and Heritage 1984; Jefferson 2004) and Tainio (1997).

.	downward/stopping intonation at the end of a prosodic entity
,	continuing intonation at the end of a prosodic entity
?	rising intonation at the end of a prosodic entity
↑	rising intonation, marked prior to the syllable or word where occurs
↓	falling intonation, marked prior to the syllable or word where occurs
<u>what</u>	emphasis
>what<	speech pace that is quicker than the surrounding talk
<what>	speech pace that is slower than the surrounding talk
° what°	speech that is quieter than the surrounding talk
WHAT	speech that is louder than the surrounding talk
wha::t	a sound or a syllable is extended
(1.9)	silences timed in tenths of a second (approximately)
(.)	micro pause, which marks a clear stop in the speech too short for measuring
((laughs))	transcriber's comments
(xx)	unrecognizable/unintelligent items
(what)	dubious hearing
hhh	audible aspirations
.hh	audible inhalation
.yeah	a period in front of a word: the word is said with an in breath
ye-	a cut-off word
[	left-hand bracket indicates the beginning of overlapping speech
]	right-hand bracket indicates the end of overlapping speech
=	contiguous utterances
£what£	smiley voice
wh(h)at	laughingly uttered word or phrase
@what@	animated voice
#what#	creaky voice
what	English word pronunciation not target-like
TP	transparency
OHP	overhead projector
W/	with
BL	blackboard
LH	left hand

RH	right hand
LL	the whole class (approximately)
(Keijo)	speaker's identity is unclear
{T GAZE	embodied phenomenon is described in COURIER (capital letters) beneath the verbal utterance the beginning of or shift in each action is marked in relation to the verbal turn-construction, and it is marked with an opening bracket
…	omitted intervening turns are indicated with three dots

APPENDIX 2: The focus classroom activities of EFL lessons

The table below charts all the classroom activities from which the data collection for the present study originates. The titles for the activities presented in the table have mostly been taken from the books used in the lessons. The titles for different exercises are my own, as they do not commonly have titles in the book. Most of the activities are whole class, teacher-led IRE-based activities.

The plus (+), and double plus (++) signs in the first column indicate the particular data collection to which each activity belongs.
+ = turn-allocation, ++ = turn-allocation and repair

Lesson	Name of the activity	Nature of the activity (teaching material used)	Description
270103_L1 (double lesson)			
+	'Qualities and professionals'	Discussion (book)	Students ascribe adjectives to different professionals.
+	'Comparison of adjectives'	Teaching of grammar (book & transparency)	Students answer grammar related questions about adjectives and their comparison.
+	'How to intensify adjectives'	Teaching of grammar (book & transparency)	Students answer grammar related questions about adjectives and their intensification.
++	'What's my occupation' mini-listening	Checking an exercise (book)	Students match a spoken description of a job and the occupation for the job.
++	'Polish your intonation' mini-listening	Checking an exercise (book)	Students identify which words were emphasized in a number of sentences.
280103_L1 (double lesson)			
++	'Find out the words in Finnish'	Checking an exercise (book)	Students find teacher requested words from a text and translate them into Finnish.
++	'Step up to the working world' (text title)	General discussion – teacher's own task	Teacher asks general questions about a text the class has just listened, students reply.
++	Questions about text – exercise	Doing an exercise (book)	Students respond to questions about the text the class just listened.
++	'The CV - your passport to the world of work' (text title)	Doing an exercise (book)	Teacher reads phrases from the text that the students translate into Finnish.
++	'The order of adjectives'	Doing an exercise (book)	Students put a number of qualifiers (i.e. adjectives) into the right order before the determinants.
+	'Adjectives as nouns'	Teaching of grammar (book & transparency)	Students answer grammar related questions about

			collective nouns and nationalities.
290103_L2 (double lesson)			
++	'Idiomatic expressions with numbers'	Doing an exercise (transparency)	Students translate English idiomatic expressions into Finnish.
++	'Household tools' -handout	Checking an exercise (transparency)	Students name a number of household tools in English.
+	'Third millennium' (text title)	Doing an exercise (book)	Teacher asks students to predict what a text the class is going to listen is all about on the basis of some hints.
++	Doing a mind map on the basis of a text	Teacher does a mind map on a transparency (book & transparency)	Students provide main points for a mind map that they have made of the text.
++	Underlining phrases from the text	Going through the phrases (book & transparency)	Students supply translation for phrases from the text; first from Eng. to Fin., then Fin. to Eng.
310103_L2 (double lesson)			
++	'Word classes' exercise	Checking homework (book & transparency)	Students convert verbs into nouns etc.
++	'Translating sentences' exercise	Checking homework (book & transparency)	Students translate sentences from Finnish to English.
++	'Writing a summary' listening exercise	Checking an exercise (book & transparency)	Students answer questions about the text they listened that summarize the main points of the text.
290103_L2-3			
+	Discussion on dramatized books	Discussion	Teacher asks questions on books and their dramatizations.
+	'English literature in a nutshell' (text title)	Short discussion / commenting	Teacher asks questions about the text the class has listened.
300103_L2-3			
++	'Translating words or idioms' exercise on the 'English literature in a nutshell' text	Going through an exercise (transparency)	Students have identified particular words or expressions from a text while they have listened to it.
++	'Fill in phrasal verbs' exercise	Checking homework (book & transparency)	Students read aloud the sentences in which they need to fill in a correct phrasal verb.
+	'The Spoon River Anthology by Edgar Lee Masters' (poem title)	Going through text related questions (book)	Teacher asks text related questions from the students and they respond.
310103_L2-3 (double lesson)			
++	'Shakespeare forever' (text title)	Going through words and expressions (book & handout)	Students supply words and expressions from the text in English as the teacher gives the Finnish translations.
+	'Romeo and Juliet'	Discussion on text	Students answer questions

	(text title)	questions (book)	about the text.
+	'Sonnet XVIII'	Discussion on text questions (book)	Students answer questions about the text.
++	'Fill in the gaps' exercise	Checking homework (book & transparency)	Students read aloud sentences and fill in gaps with correct words or expressions.
+	'The use of comma'	Teaching of grammar (book & transparency)	Students answer teacher issued grammar related questions about practices of when to use comma.

APPENDIX 3: The focus classroom activities of CLIL lessons

The table below charts all the classroom activities in the CLIL lessons from which the data collection for the present study originates. The titles for the activities are my own, as I have not had access to the books that were used in the lessons. Most of the activities are whole class, teacher-led IRE-based activities, while some are organized through divergent sequential organizations.

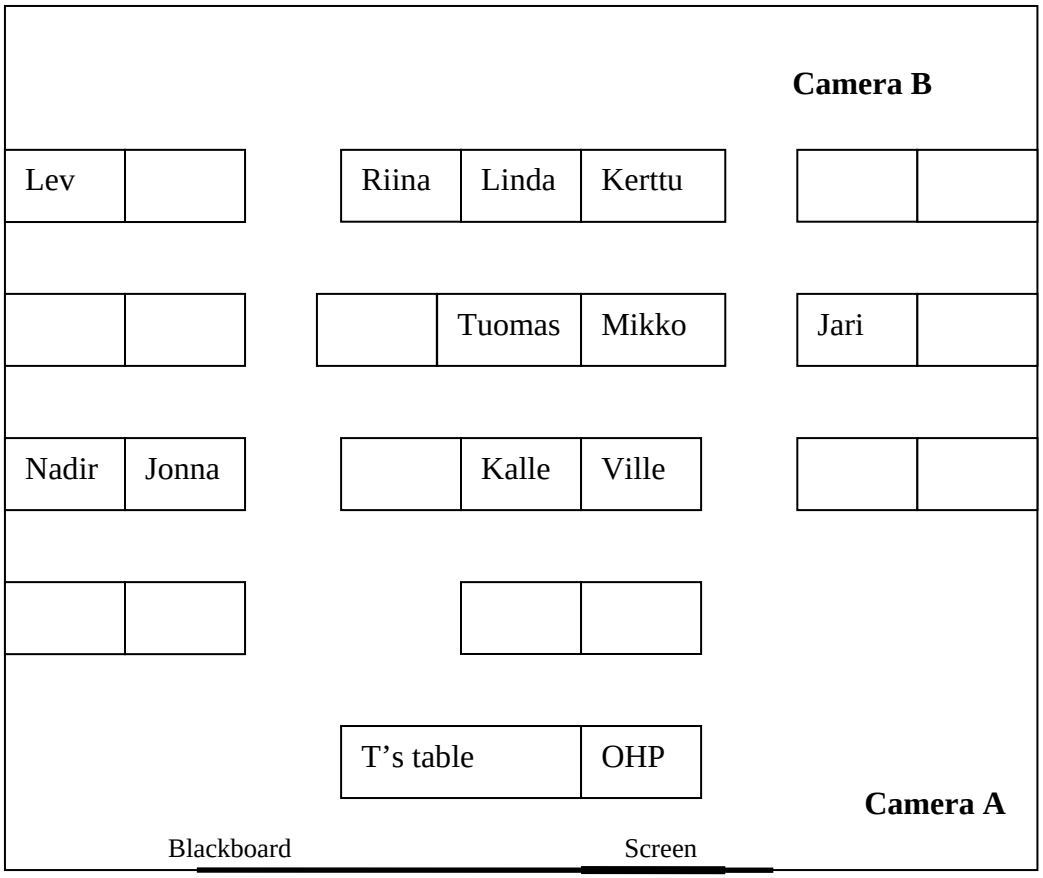
The plus (+), double plus (++) and minus (–) signs in the first column indicate the particular data collection to which each activity belongs.
+ = turn-allocation, ++ = turn-allocation and repair, – = repair

Lesson	Name of the activity	Nature of the activity (teaching material used)	Description
Biology 101203 (double lesson)			
+	'Human genitals'	Plenary teaching (book, handout, blackboard)	Students answer questions the teacher asks about human genitals.
++	'Human reproduction'	Going through homework (book)	Teacher asks questions about human reproduction from the students.
++	'Female genitalia & menstrual cycle'	Checking an exercise (book, blackboard, notebook)	Students answer 2 questions about female genitalia and the menstrual cycle.
++	'When are people ready to have sex?'	General discussion	Teacher has asked the question at the beginning of the lesson and here he wants to hear the students' opinions.
Biology 121203 (double lesson)			
++	'Pregnancy line' exercise	Checking homework: small discussion afterwards (blackboard)	Students identify the different developmental stages of a foetus on a 9-month pregnancy line on the blackboard. The teacher asks a question about the pregnancy after the checking.
++	'Pregnancy'	General discussion about pregnancy during which teacher shows pictures from a book	Students respond to teacher questions that are related to pregnancy.
Biology 171203 (double lesson)			
++	'Placenta and its properties'	Checking homework (book, transparency)	Students answer questions about the placenta and its functions.
++	'Birth and changes that take place in the baby's environment'	Checking homework (book, blackboard)	Students were supposed to reflect on the changes that take place after a baby is born.
++	'Heredity: genes'	Plenary teaching (book,	Students answer questions

		notebook, blackboard)	about heredity: the teacher is lecturing about it and asks related questions from time to time.
++	'Heredity: genes'	Checking an exercise (book, blackboard)	Students identify the right gene combination asked in an exercise.
Physics 291003 (double lesson)			
+	'Action and reaction'	Checking homework (book, blackboard)	Students write their answers on the blackboard after which the teacher goes through them one by one.
Physics 301003 (double lesson)			
	No IRE-based activities in this lesson.		
Physics 311003 (double lesson)			
+	'Waves and frequency'	Plenary teaching (book)	Student answers a question related to frequency.

APPENDIX 4: Example of the spatial organization of an EFL classroom

The illustration below is an example of the spatial organization of an EFL classroom (L1). It shows how the students are seated and where the overhead projector, the white screen, the teacher's table and the blackboard are situated.



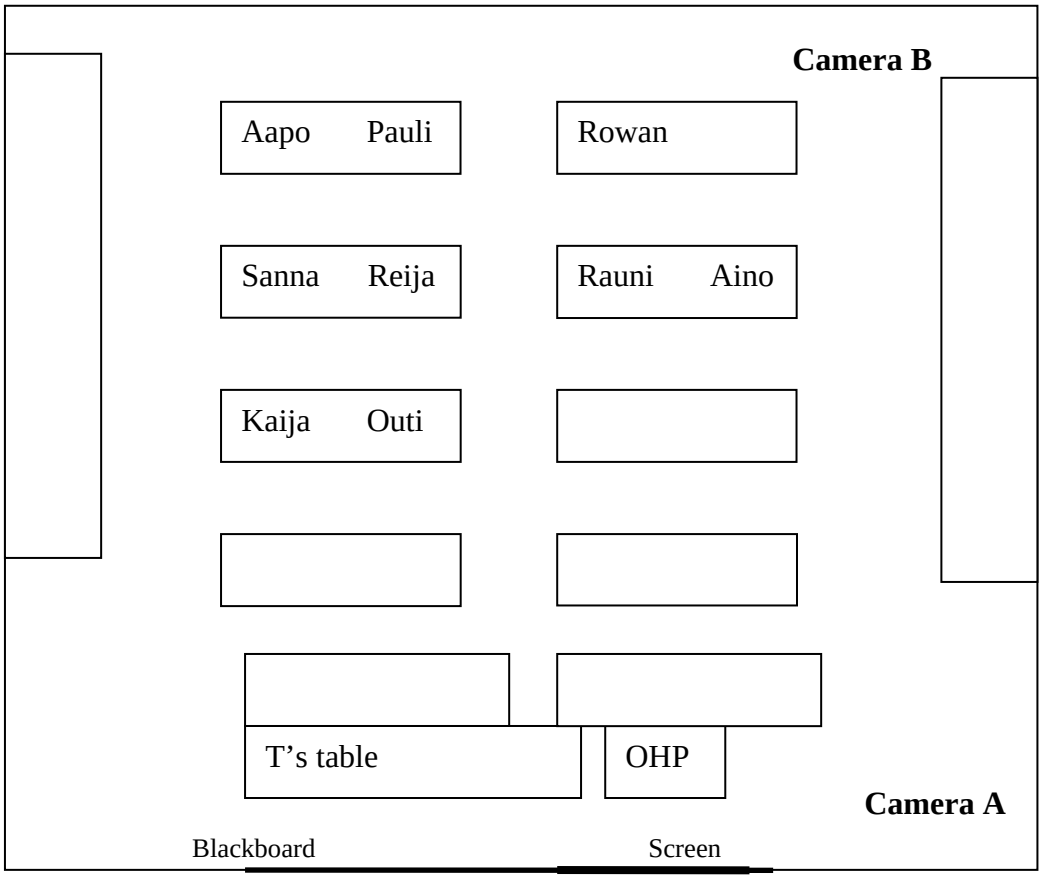
The illustration also displays the placement of the video cameras during the recordings. They were placed so that camera A followed the students and their actions, while camera B tracked the teacher's actions. The cameras were near the window wall and the door to the classroom was on the opposite wall (neither presented in the illustration).

The above illustration is not drawn in scale with respect to the original size of the classroom, but the arrangement of the furniture and the equipment were organized more or less as displayed in the illustration.

It is also worth pointing out that the students' seating order changed from lesson to lesson, and the above illustration applies only to one of the EFL lessons (L1's lesson).

APPENDIX 5: Example of the spatial organization of a CLIL classroom

The illustration below is an example of the spatial organization of a CLIL biology classroom. It shows how the students are seated and where the overhead projector, the white screen, the teacher's table and the blackboard are situated. There are also additional side tables on both sides of the classroom as the lesson took place in a physics lab.



The illustration also displays the placement of the video cameras during the recordings. They were placed so that camera A followed the students and their actions, while camera B tracked the teacher's actions. The cameras were near the window wall and the door to the classroom was on the opposite wall (neither presented in the illustration).

The above illustration is not drawn in scale with respect to the original size of the classroom, but the arrangement of the furniture and the equipment is more or less as displayed in the illustration.

It is also worth pointing out that the students' seating order changed from lesson to lesson, and the above illustration applies only to the first of the biology lessons.