Chapter One: Introduction

1.1 Purpose and aim of research

This thesis investigates how partial understanding, misunderstanding and nonunderstanding are clarified in child interaction in a process labeled in the present study 'negotiation of understanding'. Research into negotiation is significant for language learning and teaching in order to be able to further establish how input and output is shaped, how understanding in native and nonnative speaker interaction is achieved, and how learning opportunities can occur. By examining negotiated interaction between native speakers of English (NS or EL1) and Japanese (JL1) as well as between native and nonnative speakers of English (hereafter NS/NNS or EL1/EL2), the study allows discernment of similarities and variations in native speaker only and in NS/NNS dialogues.

The aim of the research is to demonstrate that negotiation is a valuable tool leading to understanding and that the negotiation process is a potential site for learning. Negotiation has been discussed in previous studies in the field of second language acquisition (hereafter SLA), however, limited consideration has been given in this body of literature to a number of inter- and intra-linguistic issues that are focused on in this research. Through analyses of negotiated interactions, this study demonstrates how the participants collaborate in order to reach understanding and how learning can take place.

This study also intends to illustrate that tracing negotiation back to native speaker child interaction in English and Japanese has the potential to provide rich insights into the mechanism of negotiation in an L1 environment. This in turn allows for a better understanding of the respective L1 norms in NS/NNS negotiation if we assume transfer takes place in the initial stages of language learning. By showing the relational importance of negotiation in a first language and with or as a speaker of English as a second language, this study will add to the body of knowledge of L1 and L2 negotiation in the field of linguistics and pedagogy in general, and to second language acquisition in particular.

The analytical focus of the present study was triggered by observing that without any intervention from a teacher, communication was negotiated quite smoothly in English conversations between native and nonnative children of Japanese origin in a school yard. Although these Japanese children sometimes had limited command of English they overcame trouble sources and reached understanding quite effortlessly. As a language teacher, I was interested in finding out how this understanding was achieved and how the ensuing negotiation process contributed to the child's comprehension and production skills.

An examination of the existing literature in the fields of negotiation and second language acquisition reveals that there tends to be a focus on the interactions of adolescents or adults, and that there are very few investigations into negotiated interactions with younger learners, a lacuna which has been acknowledged by Gass, Mackey and Pica (1998) and Oliver (2002). In addition, although baseline data of the native speaker of English in NS/NNS discourse has been mentioned in some studies, characteristics of negotiation processes in the learner's first and second language are usually not compared (Ondarra, 1997; Snyder Ohta, 2001).

Furthermore, only limited attention has been given to the way child negotiation is structured linguistically and the present research hence concentrates on investigating all negotiation turns by identifying and segmenting them into their linguistic components, before comparing and contrasting them across data sets consisting of Japanese and English L1 dialogues (or baseline data) and English native/nonnative interaction. A parallel comparison with the respective baseline data allows for a deeper understanding of L1 patterns and norms of the speakers participating in NS/NNS negotiated interactions and exposes similarities and differences in the respective discourses. The study's focus on child interaction fills an important gap since most studies research older populations and there have been only a few investigations into peer interactions of 11-12year olds.

This study, then, gives a fuller representation of the negotiation process by addressing specific areas of negotiation that have so far received limited attention. Its comprehensive functional and formal framework will contribute to a better understanding of the negotiation process as a whole and account for the turn triggering

the negotiation, the turn indicating incomplete understanding and the following response as well as eventual additional turns needed to reach understanding. In addition, the speech act of repetition is often only partially discussed such that the focus is on NS Other-speaker repetition or NNS Same-speaker repetition. The present study, however, will allow for insights into all forms and functions of repetition, as well as the role of the respective speakers and demonstrate the relationship between repetition and learning. Furthermore, pragmatic aspects of negotiated interaction such as the significance of pauses have often been overlooked in negotiation studies and will hence be investigated.

Last, but not least, linguistic analyses of the negotiation process are not purely of theoretical interest. Negotiation is a dynamic process which can promote language learning and there are important practical implications. In traditional language classrooms, instruction used to be teacher-centered and students took turns one at a time. However, through methodologies such as Communicative Language Teaching (CLT), classroom interaction has become more learner-centered and often relies on task-based peer interaction (Richards, 2005: 25). Since research has shown that negotiation forms an integral part of task-based interaction, it is essential that teachers as well as learners are aware of its effects and usefulness. Students might not know of the positive aspects of peer interaction or the probability of incomplete understanding since most text book dialogues and video clips in the language to be learnt show unrealistically smooth examples of conversations. Although this study does not stipulate the continued use of clarification requests or checks, it does encourage learners to consider the use of the linguistic tools available to them in order to understand and to be understood.

If negotiation work helps the second language learner to better understand the target language, to use input consistently and to sustain a conversation leading to further input by the interlocutor, it is indeed a process whose application should be considered. However, in spite of the frequent occurrence of negotiation, learners appear to receive little guidance on how to deal with non- or partial understanding. Since the sheltered setting of a classroom allows them to practise language in a non-threatening environment, negotiation offers an ideal environment for trying out new words and structures.

In negotiated peer interaction, learners have many opportunities to test their listening and speaking skills permitting them to recognize their level of proficiency. Active participation in the negotiation process will prepare and empower the learners for 'real world' interactions and heighten their confidence in their quest to fluency. Negotiation is a pathway to mutual understanding and it is thus important to gain deeper insights into its features and forms especially in pluralistic countries like Australia which offer many opportunities for interaction between people with different first languages.

1.2 Background to research and research foci

In spoken interaction we usually expect our interlocutor to understand what we mean to say. However, what happens when understanding is incomplete? The subsequent clarification of something, which is not or only partially understood by one or both of the interlocutors is often described in the literature as 'negotiation of meaning' or 'negotiated interaction'. 'Negotiation' is a key concept in language acquisition research and its process has been investigated consistently for over twenty years (see in particular Bitchener, 2002, 2003, 2004; Bremer, Roberts, Vasseur, Simonot and Broeder, 1996; Ellis, Tanaka & Yamazaki, 1994; Foster & Ohta, 2005; Gass & Varonis, 1985; Gass, Mackey & Pica, 1998; Hatch, 1978; Hatch, Peck & Wagner-Gough, 1995; Iwashita, 2003; Long, 1981, 1983a, 1996; Pica, Holliday, Lewis, Berducci & Newman, 1991; Pica, 1994, 2005 and Swain, 1985, 1995, 2000 and 2005).

Most second language research undertaken to date has analysed negotiation of adolescent or adult language learners (see Brooks, 1992; Deen, 1997; Ellis et al, 1994; Ellis & He, 1999; Gass & Torres, 2005; Kasper & Ross, 2003; McDonough, 2005; Miyazaki, 2001; Ondarra, 1997; Pica, Young & Doughty, 1987; Stivers, 2005 and Yano, Long & Ross, 1994). Although second languages are often learned as early as kindergarten or primary school, only a few studies (Ellis & Heimbach, 1997; Hirvonen, 1985; Oliver, 1995a,b, 2002 and Scarcella & Higa, 1981) have specifically examined interaction of pre-adolescent learners. Hence, existing second language learning hypotheses in regard to negotiated interaction appear to be mainly based on research with older students, largely ignoring children's language behaviour in similar contexts. This is confirmed by Lakshmanan (1995: 318) who argues that especially the role of input by the interlocutor has received little attention in child SLA literature.

Moreover, in the above-mentioned studies, negotiation has been mainly investigated in SLA settings and similarities or differences in negotiated interaction between the participants' native languages and native/nonnative communication are not considered. To restrict examination of the negotiation process to the L2 context and not take into consideration what is happening in L1 interactions provides only limited background information. For a fuller understanding, the present study has chosen to include L1 English and Japanese baseline data. This thorough investigation of the speaker's L1 negotiation patterns allows for a grounded and informed approach when investigating English L1/L2 interactions. Owing to institutional constraints, Japanese L1/L2 data was not available.

When applying the framework previously used by a comprehensive large scale study with children of the same age (Oliver, 1995a, b), it was found that there were aspects in regard to functions and forms of negotiation where the research findings appear to be inconclusive. The framework used in Oliver's studies was originally proposed by Long (1983a) and allows for the inclusion of certain functions such as clarification requests, confirmation or comprehension checks. However, it does not include any categories referring to the learner's responses except if they are in the form of a repetition. In addition, studies that use Long's taxonomy mainly focus on the role of the native speaker starting the negotiation sequence and very little information is given about how nonnative speakers indicate partial- or non-understanding throughout an interaction.

Hence I am arguing that a wider framework should be established to account for all turns by native and nonnative speakers in child negotiation sequences. This study then examines the turn triggering the negotiation, the turn indicating incomplete understanding, the subsequent response as well as any further additional turns needed to resolve the trouble source in the trigger.

In addition, the role of repetition in negotiated interaction often remains opaque. In the framework by Long (1983a), repetition is subsumed in clarification requests, confirmation or comprehension checks as well as in a separate category, and it is difficult to understand from his work how often the speech act of repetition occurs within negotiation sequences. This lack of clarity is also evident in Oliver (1995a, b,

2002) who examines repetition in child interaction in terms of Same-speaker and Otherspeaker repetition but again it remains unclear as to whether the native or nonnative speaker repetitions are Same- or Other-speaker. It is the case that negotiation studies often focus on NS Other-speaker repetition (or 'recasts') and NNS Same-speaker repetition (or 'pushed output') and there is a clear need to further investigate repetition by all speakers, including NNS Other-speaker and NS Same-speaker repetition, and to demonstrate the relevance of the use of repetition to language learning and language teaching.

The present study also discovered that the impact of pauses proves to be a highly interesting feature of peer negotiation. Initial findings revealed that there is a close relationship between negotiation and increased use of pauses and a need for further investigation of their relevance to the negotiation process. Pragmatic features such as pausing have received limited attention in existing negotiation studies and comparisons between pausal behaviour in first and second languages are rare. An inquiry into pauses is of particular interest here owing to the differing linguistic and cultural backgrounds of the participants. Since silent and voiced pauses are a regular component of all negotiation sequences, their relational significance will be further examined.

This study hence proposes to analyse negotiation features that have received little consideration to date and seeks to extend existing models by centring the present investigation on the following research foci. Firstly, the study investigates whether there is a meaningful difference in the amount of talk that negotiation takes up in English L1/L2 interaction compared to L1 talk in English and in Japanese. The issue here is that before entering a detailed analysis of linguistic and pragmatic features of negotiation in child interaction, one needs to understand the significance and complexity of negotiation in the speakers' first and second language.

The second research issue relates to the characteristic features of negotiation, and investigates how negotiation is constructed linguistically in L1 Japanese and in English as a first and second language. In order to deal with these aspects in a comprehensive manner, functional and formal features of negotiation sequences as well as characteristics of Same- and Other-speaker repetition in child negotiation are examined thoroughly.

The last focus is on the relevance of silence in negotiation. Since this study is not only interested in linguistic aspects and speech acts but in all facets of negotiation, pragmatic features such as pauses are also investigated in-depth.

The reason for examining English NS/NNS interaction as well as first language negotiation by both speakers is that there may be differences in the way negotiation is structured linguistically and pragmatically in their first language. Examining L1/L2 interaction alone would not allow for an understanding of the respective speakers' habitual negotiation patterns and by grounding this investigation in L1 talk, it is possible to identify intra- and inter-language similarities and differences of linguistic and pragmatic features in L1 and L2 child negotiation. These foci provide a framework for identifying characteristic features of negotiation which have not been previously explored and the research findings will hence contribute to a deeper understanding of child negotiation.

1.3 Thesis outline

Chapter Two reviews theories that are essential to an understanding of the negotiation process with a special focus on hypotheses which relate input and negotiation to second language learning. It examines existing frameworks that permit a better understanding of the speakers' turns within a negotiation sequence, discusses a variety of factors affecting negotiated interaction, surveys a number of empirical studies which have integrated these frameworks in their analyses and outlines areas of negotiation research that have received little attention to date.

The next chapter describes the methodology and design of this study. It presents details about the participants and their selection, the setting as well as the material, and explains the data collection procedures. The reader is informed about the methods of analysis and data transcription that were used and given a fuller explanation of how negotiated turns and sequences are analysed. Chapter Three also explains the English and Japanese grammatical forms that are relevant to this study's taxonomy of functions. This is followed by an introduction of terms for functions, forms of repetitions and pauses. The resulting framework is then used as an analytical point of reference and applied to subsequent analyses of 'negotiation of understanding' in English and Japanese native speaker interaction (EL1/EL1 and JL1/JL1) and English native and nonnative speaker interaction (EL1/EL2) in the following chapters.

Chapter Four focuses on describing and explaining the relative amount of negotiation and the complexity of the negotiation process and gives an initial insight into similarities and variations between data sets. Comparisons are made between speakers and languages and the length and complexity of L1/L1 negotiation as compared to EL1/EL2 negotiated interaction is explained. A differentiation is made in regard to the English level of the learners, that is, whether they are at the beginner or intermediate/advanced level. Chapter Four also discusses some aspects of nonnegotiation and includes excerpts which demonstrate those features of dialogues which comprise the greatest amount of negotiated interaction. This allows for an appreciation of why some dyads need longer and more complex negotiation sequences than others.

The research issue framing the next two chapters relates to the identification of the functions and the main forms of the components of a negotiation sequence in native and nonnative child discourse. Chapter Five accounts for the initial turns of a negotiated sequence consisting of the 'trigger' and the 'indicator'. It investigates whether NS/NNS interlocutors indicate incomplete understanding with the same speech acts that they use in their L1 interaction. The chapter firstly analyses how negotiation is initiated by native English and Japanese speakers and then examines EL1 and EL2 indicators in native/nonnative interaction. Dominant forms and functions in indicators in all data sets (EL1/EL1, JL1/JL1 and EL1/EL2) are presented in figures and tables including the number of occurrences and respective percentages. This allows for a comparison of all functions and main forms across the data.

Chapter Six investigates the third turn in the process of negotiating understanding, that is, the 'response'. It also examines the range of possible final turns of a negotiation sequence which includes the 'reaction to the response' and the 'resolution'. A focus on the overall functions of responses and some of their forms allows for the identification of salient speech acts and hence a deeper understanding of how young learners and their interlocutors overcome partial or non-understanding. The findings in these central chapters also illustrate the important role negotiation has especially in EL1/EL2 interaction, and how it can facilitate the learner's language development.

Chapter Seven investigates the forms and functions of Same- and Other-speaker repetition in the participants' first languages (English and Japanese) and in EL1/EL2 negotiation and this allows for the identification of potential similarities and variations. In the present body of literature, there is often a focus on NS Other-speaker repetition and NNS Same-speaker repetition, however, the present research examines Other- and Same-speaker repetitions by both speakers and their forms will be further classed as partial or exact repetition, elaboration or a paraphrase. Chapter Seven also clarifies the functions of repetition, and highlights the role of NS Same-speaker repetition and NNS Other-speaker repetition and highlights the role of source of the seven also date. The findings reveal that the speech act of repetition can be singled out as probably the most important tool which leads to understanding and allows the learner to improve their linguistic skills.

Since an initial analysis indicated that the influence of pauses on negotiation was forming a reoccurring pattern, Chapter Eight examines native speaker silent and voiced pauses in negotiated interaction with a focus on the discourse particles used in voiced pauses. It compares and contrasts the pauses of native English speakers in EL1/EL1 and EL1/EL2 negotiation with pauses by Japanese in JL1/JL1 and as a L2 speaker. This discussion of silent and voiced pauses provides valuable insights into this underresearched area of negotiation. The survey of the literature related to repetition and pauses is not included in the initial literature review in Chapter Two, but in the respective chapters here (Chapter Seven and Eight).

Chapter Nine reflects on some of the key findings and situates the negotiation process in a wider context. It presents negotiation as a shared accomplishment and discusses the role of negotiation within the overall discourse. This chapter also summarises the findings in relation to all research issues and looks at the contributions of the negotiation process and its implications. It emphasises the potential of negotiation as a site for learning and examines the negotiation process from a learner's and teacher's perspective. The last chapter also discusses the limitations of this study and some directions of future research.

Chapter Two: Literature review

2.0 Introduction

Communicating in a language other than one's mother tongue is not always an easy task and, at the learner stage in particular, there may be instances where we do not understand well or are at a loss as to how to express ourselves. In order to clarify meaning when reading or writing in a second or foreign language, one usually consults language books or a dictionary, however, in spoken interaction, the language learner often relies on their interlocutor as a resource for clarification. This study focuses on instances in child discourse when understanding does not take place immediately, but is clarified in a sequence of turns. In the relevant literature, this process of clarifying partial or non-understanding is variously referred to as 'negotiation of/for meaning', 'negotiation of understanding' or 'negotiated interaction'.

In spoken interaction, negotiation usually takes place on a turn-by-turn basis and can include confirmation or comprehension checks, clarification requests and repetitions. Negotiation is the foundation of successful communication and members of all speech communities will experience negotiated interactions in interpersonal encounters at some time. However, in interactions in another language, speakers may have to make additional efforts in order to get their message across. Long (1996: 418) explains the complexity of negotiated interaction as follows:

'Negotiation for meaning' is the process in which, in an effort to communicate, learners and competent speakers provide and interpret signals of their own and their interlocutor's perceived comprehension, thus provoking adjustments to linguistic form, conversational structure, message content, or all three, until an acceptable level of understanding is achieved.

The negotiation process, the focus of this investigation, is often crucial in relation to message comprehensibility, improved production of the target language and ultimately to language development. Example 2.1, below, illustrates how participants make a joint effort to reach understanding through negotiation. The extract originates from the English native/nonnative (EL1/EL2) data of the present study and includes the number of the dyad (D14) and the lines in the transcription (62-69). Pauses are indicated in

brackets in half or full seconds. The slash (/) indicates rising intonation. The first four lines are included in the extract to provide a necessary fuller context, with the negotiation sequence starting in line five:

(2.1) [EL1/EL2 (beginner), D14: 62-69]

1.	Y	(EL2)	there are flowers in the (1)
2.	Т	(EL1)	yes
3.	Y		there are (5) they are in cup/
4.	Т		no, not in a cup
5.	Y	\rightarrow	ee (1) they are in (2)
6.	Т		a bowl (1) a bowl (whispering)
7.	Y		a {bo-} bowl/
8.	Т		yeah it's in a bowl

Y, a learner of English at the beginner level, is trying to find out the shape of a vase and whether or not there are flowers in it. T confirms in line two that there are flowers and in line four modifies Y's noun phrase by adding an indefinite article. The negotiated interaction is triggered by a two second pause (in line five) with T suggesting a vocabulary item in line six, which is then repeated by Y and confirmed by T.

In order to understand an utterance, learners rely on 'comprehensible input' and to be understood by their interlocutors, they have to produce 'comprehensible output'. These two notions are essential in research analysing negotiation and the importance of the role of input and output in interactions between language learners and their interlocutors has been addressed both theoretically and empirically in first and second language acquisition studies (see Aichiba, 2003; Bitchener, 2002, 2003, 2004; Bohannon, 1993; Cohen, 2004; De la Fuente, 2002; Ellis, 1994; Hatch, Peck & Wagner-Gough, 1995; Kizuka, 2004; Leeman, 2003; Lightbown & Spada, 1993; Larsen-Freeman & Long, 1991; Long, 1983b, 1996; Mitchell & Myles, 2004; Nakura, 1997; Ozaki, 1993; Roebuck & Wagner, 2004; Pica, 1987; Snow, 1995; Swain 1993, 2005, Tarone, 2002 and Yokomizu, 1998).

In order to substantiate the framework of the present study, this chapter discusses theoretical claims and hypotheses as well as issues central to negotiation. Section 2.1 reviews theories that are essential to an understanding of the negotiation process with a special focus on hypotheses relating input and negotiation to second language learning.

It then examines research pertinent to the learner's output in the negotiated interaction (in 2.2). Existing frameworks and taxonomies which permit a deeper understanding of all speakers' turns within a negotiation sequence are analysed in section 2.3. Section 2.4 investigates a number of empirical studies which have integrated these frameworks in their research, and the relationship between negotiation and second language learning is further examined in 2.5. The final section discusses a variety of factors affecting negotiated interaction and concludes with an outline of areas which have received little attention so far.

2.1 Theories and research studies on input and negotiation

Theories of language acquisition view language input in verbal interaction as a crucial condition for learning to occur 'as it helps to make the facts of the L2 salient to the learner' (Ellis, 1994: 244). Many negotiation studies are based on the 'interactionist' theory, in which first language as well as second language learners are considered to acquire language partly with the support of others as well as through their own cognitive activities (Berko-Gleason & Ratner, 1993). Interactionists claim that input, especially in a modified form (for example, in simplified and elaborated reformulations or paraphrasing), is a crucial element in the learners' language acquisition process (Lightbown & Spada 1993: 14). In an updated version of the 'Interaction Hypothesis', Long (1996: 414) proposes that

environmental contributions to acquisition are mediated by selective attention and the learner's developing L2 processing capacity, and that these resources are brought together most usefully, although not exclusively, during negotiation for meaning. Negative feedback obtained during negotiation work or elsewhere may be facilitative of L2 development, at least for vocabulary, morphology, and language-specific syntax, and essential for learning certain L1-L2 contrasts.

L1 research reveals that children incorporate such feedback in their language production (Farrar, 1990; Sokolov & Snow, 1994). Furthermore, empirical evidence has shown that there is a positive correlation between the L1 development of a child and the amount of feedback given by their caretakers (Aichiba, 2003; Mitchell & Myles, 2004; Moerck, 1991).

In the field of second language acquisition, proponents of the interactionist model (for instance, De la Fuente, 2003; Hatch, 1978; Gass, 1997; Gass & Varonis, 1985; Iwashita, 2003; Lee, 2003; Long, 1983a, 1996; Mackey, Gass & McDonough, 2000; Nakatani, 2005; Pica, 1994, 2005 and Pica, Young & Doughty, 1987) also view interactional modifications taking place in conversations as essential for the comprehension of input and its acquisition. Hatch (1978) was one of the first researchers to focus on the importance of verbal interaction in the language learning process. Rather than understanding new structures first and then putting them into use, she suggests that syntactic structures develop through collaborative discourse between L2 learners and their L1 counterparts. Hatch investigated repair and clarification sequences in child and adult discourse, and shows in her analysis how the learner's syntax evolves through their interlocutor's input.

Hatch's study was an initial step towards an examination of the features of modified speech in communications between native and nonnative speakers. Previous research in this area had mainly analysed specific discourse components such as linguistic and conversational input modification in the form of 'foreigner talk' (Ferguson, 1975), or focused on error correction by native speakers (Corder, 1967). Interaction then was merely viewed as an opportunity for the language learner to reinforce previously learned grammatical rules.

In the early eighties, the role of input as well as the effect of interaction on comprehension and language acquisition was the primary research focus of Krashen (1985) and Long (1983a) and their propositions have been influential in a number of subsequent studies. Krashen hypothesised that the only way a language is acquired is through comprehensible input. His study implied that in order to master a language, learners have to try to comprehend other speakers and then, in a process similar to first language acquisition, learning will take place through regular exposure to the target language. Krashen viewed L2 production as the result, not the source, of acquisition.

Although Krashen's 'Input Hypothesis' underlined the important role of comprehensible input in relation to language learning, his proposition that input alone leads to acquisition has been the subject of controversy. For example, Swain (1985) noted that despite extensive exposure to comprehensible input in French immersion programs in

Canada, her English students often had difficulties mastering grammatical aspects and lexis of the target language. Gregg (1994) and Lightbown and Spada (1993) underlined the absence of empirical research data in some of Krashen's work, and Ellis (1994) asserted that few studies are available to prove his hypothesis. Cook (1993) argued that Krashen's hypothesis should provide a more explicit explanation of what is actually meant by 'comprehensible input'.

On the other hand, Long (1983a) argued that in interactions with nonnative speakers it may be necessary to modify utterances in order to make them comprehensible. The necessity of comprehensible or 'modified' input in the second language acquisition process was further emphasised in his (1983b) paper dealing with the relevance of linguistic and conversational 'adjustments'. The study employed the term 'adjustment' or 'modified input' when changes in linguistic forms were made by the NS and directed to the NNS. Long proposed that modified input by the NS can help understanding of target structures and facilitate second language development.

Long then examined modifications in the structure of the discourse over a number of turns and he termed these stretches of discourse which were dedicated to meaning clarification as 'modified' or 'negotiated interaction'. His study proposed a typology of possible 'negotiation moves' (or turns) made by the speaker and by the addressee (Long, 1983a: 136-137). He claims that these turns may consist of confirmation and comprehension checks (including repetition) or clarification requests consisting of Wh-and Yes/No or tag questions, as well as statements such as 'I don't understand'. Since Long's framework is also partially adopted by the present study, it will be discussed in more detail in section 3.8, as well as in Chapter Five.

Recent studies using Long's typology include Deen (1997), De la Fuente (2002, 2003), Yamaguchi, Iwasaki and Oliver (1999), Iwashita (2003), Mackey (1999), Mackey and Oliver (2002), Oliver (1995a, b; 2002) and Williams, Inscoe and Tasker (1997). Oliver (1995a, 2002), Yamaguchi et al (1999) and Iwashita (2003) confine their analysis to meaning negotiation triggered by nonnative speakers only, whereas Deen (1997) and Williams et al (1997) examine negotiated interaction triggered by nonnative and native speakers. Although Long's proposition relates to 'negotiated interaction', the main focus of his typology is on the input of the more competent speaker, such as clarification requests and checks by the native speaker. However, in order to understand the implications of negotiated interaction, input as well as output have to be investigated and the following section hence looks at how the learner's output and its role in language learning is addressed in the respective literature.

2.2 Interaction and output

The importance of output lies at the heart of Swain's research (i.e. 1985, 1993, 1995, 2000, 2005) and she proposes that comprehensible input alone is not a sufficient prerequisite for acquisition. Her 'Output Hypothesis' (Swain, 1985) focuses on the role of the NNS in negotiated interaction and suggests that for the learner 'comprehensible output' is just as relevant to second language mastery. Swain (1993: 159) summarises the role of output in second language acquisition by proposing that it improves the learner's fluency, helps the learner to notice their linguistic shortcomings and offers the learner an opportunity to test out hypotheses. Moreover, the learner's output may generate responses from their interlocutor leading to conscious reflection on structures and meaning.

Swain's proposition was influenced by empirical studies with French immersion students whose first language was English. All classes in the immersion school were conducted in French but the students made infrequent use of the target language outside the school setting. Although these students had no difficulties in understanding the target language and many opportunities to hear it, they failed to produce flawless discourse even after many years of instruction. Swain (1985) therefore suggests that their inadequate competence (particularly their grammatical competence) was not due to insufficient comprehensible input but to limited output opportunities in the classroom. She argues that 'one learns to speak by speaking' and claims that learners need to produce output to try out hypotheses and to develop their knowledge of the language (p. 248). Their output should not only be comprehensible but coherent, precise and appropriate to the context. She further emphasises that interactions where communicative breakdowns take place - with the learners being 'pushed' into alternative ways of getting their message across - provide excellent opportunities for learning to occur. Swain describes the learner's 'modified output' as 'pushed output'.

Swain (1998a) focuses on pushed output taking place in learner's reflections during a task based activity, in which the NNS participants were encouraged to test out their hypotheses in a dictagloss task, where groups of students are required to construct a text together. Through metatalk about structures and meaning most participants succeeded in producing L2 target forms. In her 1998b paper in which she considers 'the output hypothesis and beyond', Swain suggests that 'the beyond' is the collaborative dialogue where speakers' construct linguistic knowledge in a joint effort. Her data further shows that collaboration in problem-solving activities facilitates learning processes and leads the participants to the development of new knowledge.

An earlier study by Donato (1994) also examines learners' co-operation in small group activities. He views their negotiated interaction as a form of collective scaffolding and suggests that group work in problem solving activities represents more that just an exchange of linguistic knowledge, since it offers the participants the opportunity to further develop their language skills. His research proposes that pushed output could result in long term restructuring of the learners' L2 repertoire.

In sum, the process of meaning negotiation is closely related to the theories on input, interaction and output and, as already recognised by Hatch (1978) dialogic collaboration plays a central role in the learners' language development. Within the dialogue, the comprehensibility of in- and output is essential to language learning with the negotiation process often being the tool for making utterances comprehensible. Early research focused on different aspects of negotiated interactions such as foreigner talk and error correction; input studies primarily examined the speech directed to the nonnative speaker, whereas output research mainly investigated learner utterances. However, most studies underline the importance of collaboration and stress the role and responsibility of all speakers in overcoming incomplete understanding.

Overall there are many facets to the negotiation process and in order to gain insights into its mechanism and its relationship to language learning, a number of perspectives have to be taken into account. The next section therefore looks at research studies which have been influential in disclosing the complexities of negotiated interaction by further analyses of its components.

2.3 Investigating 'negotiation sequences'

All turns focusing on clarifying or 'negotiating' understanding by two or more speakers form sequences. Such sequences include the turn which begins the negotiation as well as the turn which displays that understanding has been achieved. Up to the mid-eighties only discrete discourse functions were analysed until Gass and Varonis (1985) examined the negotiation process as a whole. They propose the following terms as components of negotiated interaction: 'trigger', 'indicator', 'response' and optionally a 'reaction to response' (p. 150) and these terms are also employed in the present study. Dialogue 2.2 is an example of a negotiation sequence, taken from the English native speaker data (EL1) of the present study, employing Gass and Varonis' (1985) terminology:

(2.2) [EL1/EL1, D6: 89-92]

1. E	they are linking arms and holding hands		
2. K	a: (0.5)	trigger	
3. E	do you understand	indicator	
4. K	holding hands like that (gesture)	response	
5. E	yes	reaction to response	

Although Gass and Varonis' (1985) framework acknowledges the importance of examining the negotiation sequence as a whole, it simply labels the turns within a negotiation sequence and does not further analyse their functions or forms. It leaves unclear who and what might have triggered the negotiation process and how partial or non-understanding is indicated and then resolved. Furthermore, it also remains opaque as to whether the message is modified in the indicator or in the following response.

A finer grained analysis of turns within a negotiation sequence is proposed by Pica, Holliday, Lewis, Berducci and Newman (1991). Their study also lists four categories. As in Gass and Varonis (1985), the initial utterance of the process is called the 'trigger' (category one). However, a differentiation is made for 'triggers' by 'native' and 'nonnative' speakers. This is followed by the interlocutor's reaction, called 'signal response' (category two) which is subdivided into confirmation or clarification requests that may include a repetition of the trigger in a modified or unmodified form. Their third category is a 'follow up response' which also has subcategories such as 'acknowledgment', 'indication of difficulty', 'topic switch' as well as repetition of 'trigger' or 'signal response' with or without modification. Modification in repetition can take place at the semantic, morphological or syntactic level.

In an optional fourth category, Pica et al (1991) suggest that the negotiation sequence might be summed up with a comprehension signal or followed up by a continuation move. However, negotiation continuing beyond four turns is not further elaborated. Pica et al's (1991) study gives examples of all categories, offering other researchers a comprehensive model for data analysis. Later Pica (1994) suggests that irrespective of which labels are used for the components of meaning negotiation, they describe a process in which interlocutors anticipate or experience difficulties in understanding a message and try to solve their communication problem through modification and restructuring of their interaction.

Often the trouble source (or trigger) is not resolved within three or four turns and negotiation sequences can sometimes stretch over more turns depending on how long it takes the individual speakers to clarify their messages. If the 'response' is the catalyst of further negotiation, some studies (for example, Oliver, 1995a,b; Yamaguchi et al, 1999; Iwashita, 2003) consider this to be the 'trigger' for a separate negotiation sequence.

Williams, Inscoe and Tasker (1997: 310), however, rightly argue that negotiated turns should be looked at holistically and their study uses the term 'episode' for an expanded negotiation. Other researchers, such as Shehadeh (2001: 433) employ the term 'extended negotiation of meaning' for longer sequences such as that illustrated in 2.3:

- (2.3) (Shehadeh 2001: 437)
- 1. NNS one bottle (1.0) and a keettle err a kittle

2. NS	a what?
3. NNS	a kittle
4. NS	what's that for?
5. NNS:	for contain water (1.0) a kettle a kettle
6. NS:	ahah right yes (0.7) kettle that's a kettle

Similar examples of ongoing negotiation are called 'chained sequences' in research by Nakahama, Tyler and Van Lier (2001: 398-399). Their study defines a sequence as 'occurrences of incidents as serial units'. Nakahama et al also use the term 'side

sequences'. However, this term is confusing because in previous research (Jefferson, 1972) it refers not only to incomplete understanding but also to subtopics not forming part of negotiated interaction. This study proposes the terms 'simple' and 'complex' sequence and the terminology adopted for all turns and sequences of negotiated interaction is presented together with additional explanations and excerpts in section 3.6 and in Chapter Three.

After an examination of frameworks and taxonomies in relation to speakers and turns in a negotiation sequence, it is important to further investigate studies which incorporated these frameworks in order to reach an understanding of the findings to date.

2.4 Previous application of existing negotiation frameworks

This section explains the range of perspectives found in empirical studies over the past twenty years. These include works by Assis (1997), De la Fuente (2002, 2003), Foster (1998), Foster and Ohta (2005), Futaba (1996), Gass and Torres (2005), Iwashita (2003), Oliver (1995a, b; 2002), Ondarra (1997), Williams et al (1997) and Yamaguchi, Iwasaki and Oliver (1999). All of these have integrated the important insights developed by Long (1983a), Gass and Varonis (1985) and Pica et al (1991) into their analyses. Since the present research relies to some extent on these three frameworks, this section examines how each of these seminal researchers has influenced research in the field.

It is perhaps useful to start with an explanation of Oliver's (1995a, b) work which is of particular interest since it is one of the rare studies looking at negotiation in dyadic interaction with NS/NNS children in the same age range as the children participating in the present research. Oliver (1995a) uses the models proposed by Long (1983a) and by Gass and Varonis (1985). She investigates negotiation work triggered by nonnative speakers, and then examines how the native speakers indicated their incomplete understanding: either through 'negotiation', 'recast' (other-repetition) or by 'ignoring the error' (not leading to negotiation). Her analysis of the NNS responses shows that about one third of the NNS incorporated native speaker recasts which have the effect of making target structures salient and focusing the attention of the learner on the utterance provoking the negotiation. The learner might then take up the suggested target structure in the following turn.

Any reworking of theoretical paradigms calls for extra attention to the meaning of terms. Mackey and Oliver (2002) define 'negotiation' and 'recast' as follows: 'Negotiation for meaning takes place in response to breakdowns in communication, and recasts are more targetlike alternatives which follow a learner's non-targetlike utterance' (p. 464). Other terms for 'recast' used in related studies are: other-repetition, explicit feedback, corrective or negative feedback, or interactional feedback. However, recasts represent only one form of the speech act of repetition (other-repetition in an elaborated or paraphrased form) and since they are treated as repetitions in the present study, the terms for their forms are laid out in section 3.9 and further investigated in Chapter Seven.

The present study also found that dividing the data into 'negotiation' and 'recast' might not adequately account for what is happening in the native as well as nonnative speaker negotiated interaction. The broad brush label 'negotiation' is particularly problematic as it obscures functions and forms of the respective speaker's utterances. In an in-depth study, Oliver (1995b, 2002) provides a more detailed account of what occurs in the 'negotiation' phase of the interaction by using Long's typology that consists of clarification requests, confirmation and comprehension checks, as well as Self- and Other-repetition. One of her major findings was that children tended to use far fewer comprehension checks than adults, and she relates this to the egocentricity of children, tending to focus more on their own meaning rather than helping their partner to understand.

Although the above studies give important insights into child negotiation, there are turns in the negotiation sequence which are not considered or analysed. For example, features such as errors of nonnative speakers are focused on as a trigger for negotiation (first turn), but features of native speaker triggers are not examined. Long's framework of requests, checks and repetition is therefore only applied to native speaker indicators in the second turn in a negotiation sequence. Furthermore, nonnative speaker responses in the third turn of negotiated interaction are only considered if they include a recast. Native speaker responses and possible subsequent turns, such as 'reactions to responses' in child negotiation, are not further examined. In order to address some of these shortcomings, several researchers have modified Long's categories to accommodate additional findings. Williams et al (1997: 310-313), for example, subdivided confirmation checks into 'positively oriented' and 'neutrally oriented' checks depending on whether or not the speaker is clearly expecting a confirmation. Moreover, their clarification requests exclude utterances that only seek to confirm given information. As in Long, Williams et al's (1997) research defines repetitions in a separate category by form and not by function. However, since repetitions are also included in confirmation and comprehension checks, it remains unclear if they were counted only in one or in several of the categories. Further explanations or examples of the corresponding categories are not available in William et al's (1997) study and therefore the exact role of repetition remains opaque.

The seminal framework proposed by Gass and Varonis (1985) is successfully integrated in a thorough investigation on negotiation and its effect over time by Ondarra (1997). Her research examines how eight Dutch adult learners of Spanish collaborated with each other and with native speakers to negotiate understanding in a language other than English. She effectively argues that negotiation is a very complex process which also requires qualitative data analyses. Ondarra examines the triggers of negotiation sequences and the following turns at the discourse and pragmatic level and looks at variables such as how tasks influence the negotiation process. Ondarra stipulates that in order to better understand negotiated interactions with L2 learners, it is necessary to collect L1 baseline data not only in the target language but also in the learner's native tongue. This would allow for insights into NS and NNS usual interaction styles and to trace back certain L2 variations to patterns and norms in native speaker negotiation.

The Gass and Varonis (1985) model is also applied in Brooks' (1992) research investigating whether there are resemblances in negotiation styles between learners of Spanish and learners of English. Brooks found that negotiation sequences of Spanish NNS were similar to English NNS and that, in both groups, the interactional use of language played an important role in L2 development. The participating students negotiated more abundantly over jigsaw tasks than over interview-type tasks, a finding which is confirmed by other studies as well (see, Assis, 1997; Futaba, 1996; Pica, Kanagy & Falodun, 1993). The influence of tasks on negotiation work is further discussed in the methodology section 3.2.

Another seminal framework negotiation research has relied on is Pica et al's (1991) typology (for example, in studies by Futaba, 1996 and Assis, 1997). Futaba investigates NNS/NNS and NS/NNS dyadic interaction over a jigsaw task in English with all NNS participants sharing the same L1 (Japanese). His findings indicate that NNS dyads negotiate just as much as NS/NNS and are able to give each other valuable feedback. Futaba proposes that knowing each other's first language and communication style can make a positive contribution to second language learning. A salient feature of the NNS/NNS negotiated interaction is that the Japanese participants paused before starting their English sentence, sometimes for as long as ten seconds, and that the Japanese interlocutor waited during this time; however, participating English NS were not so patient. The impact of pauses on the negotiation process is rarely discussed in the literature and since longer pauses with Japanese are a consistent feature in the present study as well, they are further investigated in 3.10 as well as in Chapter Eight.

Assis (1997) also bases her investigation on Pica et al's (1991) paradigms when examining the frequency of L2 negotiation in interactions between Brazilian learners of English. One of her findings related to NNS/NNS discourse was that nonnative speakers accepted inappropriate utterances more easily, a factor which reduced the number of negotiation opportunities. In sum, empirical studies have found that negotiation is a significant feature in interactions with nonnative speakers. It has been shown that feedback is noticed and utilised by the second language learner and that the negotiation styles in other languages (for example in Spanish) are similar to L2 English interaction. Sharing a first language is seen as an advantage by some researchers (Futaba, 1996), but may lead to less negotiation work (Assis, 1997). Most of the studies examined in this section position themselves in the field of second language acquisition (SLA) and there appears to be a general consensus that negotiated interaction is essential to improved comprehension and beneficial to the learner's language development. The next section will look at the proposed relationship between negotiated interaction and learning.

2.5 Learning through negotiation

Long (1983b: 189) deducted that firstly, linguistic 'adjustments' (feedback) by the native speaker lead to better comprehension; secondly, comprehensible input promotes acquisition; hence thirdly: negotiation facilitates acquisition. The first two points have

received consistent support (in, for example, Bitchener, 2002; Doughty & Williams, 1998; Ellis, 2003; Foster & Ohta, 2005; Gass & Torres, 2005; Lee, 2003; Leeman, 2003; Lightbown & Spada, 1995; Loewen, 2005; Long, Inagaki & Ortega, 1998; Mackey & Oliver, 2002; Mackey & Philp, 1998; Mackey, Gass & McDonough, 2000; Oliver, 1995a, b; 2002; Pica, 1994 and 2005). A decade later Long (1996) acknowledges that a direct relationship between negotiation work and acquisition is more difficult to establish since acquisition takes a while and other intervening variables are difficult to control for over time. However, Long (1996) suggests that negotiation 'facilitates acquisition because it connects input, internal learner capacities, particularly selective attention, and output in productive ways' (p. 452).

There are a number of overviews of studies relating negotiation to language development. For example, an investigation of empirical evidence of relevant research by Pica (1994) demonstrates that negotiation does contribute to the learners' comprehension of L2 input, their production of modified output, and to their attention to L2 forms. Pica concludes that in combination, these contributions assist second language acquisition. Most of the surveyed studies retrieve their data from task-based interaction. In a recent paper, Pica (2005) underlines the 'effectiveness of tasks in drawing students' attention to form, function, and meaning in ways that are considered vital to students' L2 learning' (p. 339) thereby acknowledging the important role tasks can play in the language learning process.

Additional overviews of negotiation studies by Gass, Mackey and Pica (1998), Mackay and Gass (2005) and Doughty and Williams (1998) also confirm a relationship between task-based interaction and language learning. A study by Lightbown and Spada (1995) demonstrates that a communicative context especially helps younger students to improve their L2 knowledge and performance. The participants in their research consisted of 100 learners (aged 10-12 years) enrolled in a five month intensive English course. Their analysis of a large corpus of classroom data gives empirical support to the hypothesis that negotiated peer interaction over a task enhances accuracy, fluency and the overall communicative skills of younger L2 students as well.

Besides classroom peer interaction, the role of the teacher in negotiation is crucial. Doughty and Varela's (1998) study points out that teachers should not presume that students will notice linguistic features without their assistance, but should draw the students' attention to meaning and form. However, they suggest that this focus should arise incidentally, and that it should occur in conjunction with, and not as an interruption of, communicative interaction. Doughty and Varela's (1998) overall results of high school student interaction show that recasts by the teacher are regularly noticed and used. A comparison of the pre- and post-tests of the treatment and control groups revealed that the treatment group improved in accuracy and made a greater number of attempts at the target structures.

In order to further investigate the role of the negotiation and learning in interactions with younger learners (seven to eight years old), Harley (1998) uses a research design similar to Doughty and Varela (1998). Over a period of three weeks the teacher involved the students in a variety of activities centring on the gender of articles, a persistent problem in L2 production of French. Harley also finds that an instructional focus on form enhanced the learner's second language proficiency. A comparison between pre- and post-tests, as well as a delayed post-test, revealed that the experimental group consistently used articles more accurately than the control group confirming that negotiation can lead to improvement of the learner's target language.

Other research focussing on the relationship between negotiated interaction and language development comprises a seminal study by Carroll and Swain (1993) establishing that negotiation assists students to retain new grammatical features. Their treatment group performed significantly better than all other groups and Carroll and Swain tentatively concluded that negotiation facilitates learning of a variety of grammatical structures. Their findings are supported by Izumi and Lakshmanan (1998) whose Japanese participants in an experimental group were taught the English passive through negotiated interaction in the form of repetition (recasts). In a post-test, these students out-performed the students placed in the control group which had not received any explicit instruction of the English passive.

Positive developmental effects brought about through recasts are also found in a study by Mackey and Philp (1998). Their research uses information gap tasks to investigate the development of question forms in English as a second language and their focus is on NS recasts of the learners' nontarget-like forms and the learners' immediate response to these recasts. As predicted by Long's interaction hypothesis, their findings show that interactionally modified input is beneficial for the learners and helps them with the restructuring of their interlanguage.

Similarly, a longitudinal study by Mackey and Oliver (2002) shows that students receiving recasts improved in terms of question formation. Their findings reveal how English learners can reach understanding through forming appropriate questions and how question forms relate to the learners' language development. Mackay's (1999) has established in a major study that interrogative structures play a crucial role in negotiation sequences and these findings are consistent with the results on question forms in the present research.

Rather than focussing on grammatical features, structures or question formation, some negotiation studies based on Long's claim that negotiated interaction facilitates comprehension and learning chose to focus on lexical items. Support for a relationship between negotiation and vocabulary acquisition is found in studies by De la Fuente (2002, 2003), Ellis and He (1999), Ellis and Heimbach (1997), Ellis, Tanaka and Yamazaki (1994), as well as in Loschky (1994).

It is interesting to see that recent studies like De la Fuente (2003) examine the potential effects of negotiation in regard to L2 vocabulary development in the field of Computer-Mediated Communication (CMC). De la Fuente's findings show that CMC tasks where negotiation takes place appeared to be greatly beneficial in regard to L2 lexical development and the researcher particularly underlines the role of pushed output within the negotiation process (pp. 78-79).

In earlier studies, Ellis et al (1994) and Pica (1992) establish that learners do not have to negotiate actively, and that just listening to interactionally modified input in negotiation sequences is sufficient for better comprehension and vocabulary acquisition. Incidental learning through listening to negotiated interaction is further discussed in Gass (1999) suggesting that a considerable part of L2 vocabulary is acquired incidentally, that is 'as a by-product of other cognitive exercises involving comprehension' (p. 319). This view is sustained by Loewen's (2005) recent study on negotiation and interaction showing that an incidental focus not only on vocabulary but also on form helps the learner to better retain the targeted linguistic items.

Taken together, these findings suggest that negotiation is indeed a process offering the learner the opportunity to extend their L2 knowledge by improving their comprehension as well as their language production skills. Although a clear-cut correlation between negotiation and learning appears sometimes difficult to establish owing to the complex nature of ongoing cognitive processes, reviewing relevant literature shows that there are a number of studies taking the relationship between meaning negotiation and language acquisition for granted.

Rather than relating negotiation to learning opportunities, some studies focus on factors which might impede negotiation work and thereby give students fewer opportunities to be exposed to the negotiation process. Some of these factors influencing negotiation will be examined in the following section.

2.6 Factors influencing negotiated interactions

The research discussed so far has mainly related to analyses of the relationship between negotiation and L2 comprehension, production and language development. Other studies take this relationship for granted and focus only on factors that might affect negotiated interaction, such as age, gender, setting and the type of communication engaged in. Such issues are the subject of considerable debate and an investigation on negotiated interaction should be aware of the effect such factors might have on the negotiation process.

Most studies related to negotiation examine interactions between adolescent or adult students, and only a small body of research has examined young learners' negotiated interactions (Ellis & Heimbach, 1997; Hirvonen, 1985; Oliver, 1995a, b; 2002 and Scarcella & Higa, 1981). Scarcella and Higa (1981) suggested that in communications with children negotiation played a less prominent role since the adult learners in their study did most of the work to keep the conversation going. In a small scale study including ten kindergarten students, Ellis and Heimbach (1997) investigated the effects of negotiated interaction on learning of new vocabulary, finding that six of these children failed to participate in a single negotiation sequence. Both of these studies examined interaction between children and adults, and Ellis and Heimbach (1997) concede that the age difference might have led to the reluctance of their participants to negotiate.

Hirvonen (1985) and Oliver (1995a, b, 2002) clearly demonstrate that children can effectively negotiate for meaning at the sentence and discourse level if allowed to do so with their peers. Hirvonen (1985) shows that speech adjustments take place in conversations between young learners and their native speaker counterparts, and that monolingual English children (as compared to bilingual children) modify their language in order to achieve understanding. Oliver (1995b) establishes that meaning negotiation occurring in child dyads is similar to adult negotiation (except for comprehension checks). A comparison of the amount of negotiation by 8-10 year olds and 11-13 year old students respectively showed that there was no significant difference between these groups. Although these studies provide some insights into negotiated interaction of young learners, child communication in a classroom setting between L2 learners and native speaker peers is a little explored area. This lacuna has been acknowledged by Gass et al (1998) who expressed a need for more research about child negotiation.

In other studies that examine factors which influence negotiation, the gender of the participants has been considered as a variable. For example, Pica et al (1991) show that the frequency of meaning negotiation is similar in mixed gender NNS/NS dyads and same gender NS/NNS dyads, however, they noticed fewer opportunities for modified in- and output of females in interactions between NNS females and NS males. However, they concluded that their study did not provide a clear answer to the question of the role of gender as a discriminating factor in the frequency of meaning negotiation, since some of the behaviour could be attributed to cultural differences. The results of Oliver's (1995b) study suggested that the occurrence of negotiated interactions was not significantly affected by the participants' gender, although there was a slight tendency for older males (11-13 years old) to negotiate more than females in the same age group.

Swain and Lapkin (1998) raise the issue of how differing individual approaches to task completion do not provide the same learning opportunities to all students. Their indepth analysis shows how eighth-grade students (doing a jigsaw task in a French immersion classroom) solved linguistic problems by using their first and second language. Negotiation in dyadic interaction resulted in the co-construction of the target language and their study's post-test established that the participants had retained newly

acquired language over time. However, it was noticed that some students participated more reluctantly than others hence benefiting less from the learning opportunities taking place during negotiated interaction.

Not only individual differences, but also the setting appears to influence negotiation. Williams et al (1997) examine the mutual construction of discourse in a chemistry lab by using the models by Long (1983a) and Gass and Varonis (1985). Their results show that the main goal of the participants was to complete their chemistry tasks, with the bulk of the talk confirming or clarifying information. A focus on form or 'pushed' output was very narrow and the fact that only a few language learning opportunities occurred was traced back to the setting, the chemistry lab, where the students' goal was the execution of a project.

Furthermore, the quantity and quality of negotiation can vary according to the type of person with whom the learners interact, that is, with their teacher or peers, native or nonnative speakers. In today's language classrooms, group work is an integral part of many lessons, and learners were found to produce more language, greater motivation and less anxiety when interacting with their peers rather than with a teacher (for example, Pica, Lincoln-Porter, Paninos & Linnell, 1996). Pica et al's (1996) comparative study indicated that NNS/NNS interaction can address some of the nonnative speakers' feedback, input and output needs, although NS/NNS dialogues provided the learners with more input. Interestingly, learners' modified output was similar in interactions with each other or with native speakers.

On the other hand, Gass and Varonis (1985) show that L2 learners negotiated more when paired with other NNS, a finding which is also reported in Futaba's (1996) study. But this could also result from the NNS familiarity with tasks since the native speakers in their NS/NNS data had never interacted with learners through communicative tasks. In contrast, Takahashi (1989) found that NS/NNS conversations produced more negotiation, although compared to NNS/NNS communication the difference was not statistically significant. It appears to remain controversial if NS/NNS or NNS/NNS interaction produces more negotiation, however, in regard to the quality of the target language, NNS exchanges with NS appear to be superior.

A further observation in relation to NS/NNS communication is that a number of studies found that the negotiation process is dominated by the native speaker (Takahashi, 1989; Deen, 1997). The results of Deen's (1997) study indicated that the NS tended to control the content and form of the conversation through the use of clarification and confirmation checks. However, Firth and Wagner (1997) questioned the assumption that such discourse is asymmetric and their research showed that in spoken interaction, speakers tended to collaborate in the construction of meaningful discourse. Additional research on this topic found that with respect to the amount of talk, it was the NNS who dominated the conversation (Zuengler, 1989).

Other studies have established that negotiation of meaning might not always be the preferred option of the interlocutors. Foster (1998), for example, notices that problems in conversations are not always solved and some of the students participating in her research preferred to feign comprehension rather than to admit not having understood. The setting of her study was a classroom in a college, and the interactants were adult students learning English part-time. Twenty-one students were observed and recorded during four lessons while doing a task. Foster noted that many of the negotiation sequences could be traced back to certain participants, a reality which is disguised in statistics mentioning only the overall amount of negotiation moves. A number of her participants did not engage in any negotiation at all. Foster (1998: 18) suggests that these students appeared to adopt a 'pretend and hope' strategy: pretending to understand and hoping that a future utterance will clarify the situation.

In sum, in order to account for what is going on in the negotiation process *per se*, it is important to be aware of a number of issues affecting interaction. Research studies have shown that description and interpretation of negotiated interaction can help to further our understanding of the connections between discourse and language development. Long's premise that negotiation of meaning leads to linguistic and conversational modifications and hence to improved comprehension, output and learning opportunities has been accepted by many as a valid basis for further research. A number of frameworks have been established in order to investigate the negotiation process and studies have used these models to explore specific aspects of negotiated interaction. The beneficial effect of meaning negotiation in regard to the comprehensibility and production of language has been established and some evidence for a relationship between negotiation and acquisition has been found. It is nevertheless a complex relationship, which can only be confirmed through longitudinal research, which in turn makes isolation of just one factor difficult. Furthermore, a variety of factors influencing meaning negotiation have been identified, such as the participants' age or gender, the type of communication, and the setting.

There are, then, a number of little-researched areas that require further investigation. In first language acquisition, the data often stems from very young children; in second language research, from adolescents or adults. Moreover, in SLA, baseline language of the respective participants is usually not included, leaving it unclear how understanding is negotiated in their first language. In regard to functions, triggers by the nonnative speaker and clarification requests and checks by native speakers leading to responses by NNS have been widely researched, but less attention has been given to NS triggers and how learners request clarification or check comprehension. Furthermore, although repetition is examined in many of the studies discussed above, only certain forms and certain speakers appear to be focussed upon and the overall role of repetition within the negotiation process remains ambiguous; pragmatic features of negotiation are rarely mentioned.

In order to address these shortcomings and to extend the currently limited research on linguistic features and patterns of child negotiation, the present study proposes the following research foci (as introduced in section 1.2, p. 6). Firstly, this study investigates (in Chapter Four) if there is a meaningful difference in the amount of talk that negotiation takes up in English L1/L2 interaction compared to English and Japanese L1 talk. This analysis allows for further understanding of the significance and complexity of such sequences before considering in detail the linguistic and pragmatic features of negotiated interaction.

The second research issue relates to functional and formal features of the negotiation process and Chapters Five and Six allow valuable insights into how negotiation is constructed linguistically in L1 Japanese and in English as a first and second language. The present study also considers gaps in the research on adolescent and adult negotiation research, perhaps the most important being the lack of a detailed examination of form and functions of all negotiated turns, which is provided in the present study. A unique focus of this research lies in its examination of the characteristics of Same-speaker and Other-speaker repetition within negotiation sequences (in Chapter Seven) and its pragmatic analysis of the role of silent and voiced pauses (in Chapter Eight). For the purpose of this research, a cross-sectional approach has been chosen and the mainly qualitative analysis of the data and all methodological considerations are further explained in the next chapter.

Chapter Three: Methodology / Theoretical considerations

3.0 Introduction

This chapter outlines the methodological approach taken in this study. The participants and the setting are presented in 3.1; then, the material and the data collection procedures are described in 3.2 and 3.3 respectively and the approach to data analysis and data transcription is discussed in 3.4. A fuller explanation of how negotiated turns and sequences are analysed is found in section 3.5 and 3.6. In order to address the research issues in regard to form and functions, forms will be discussed in section 3.7 and this study's taxonomy of functions is presented in section 3.8. Examples of repetition and the corresponding terms are given in section 3.9 and the role of pauses/hesitation is exemplified in 3.10. The resulting framework will then be used as an analytical point of reference and applied to subsequent analyses of 'negotiation of understanding' in English and Japanese native speaker interaction (EL1/EL1 and JL1/JL1) and English native and nonnative speaker interaction (EL1/EL2) in the following chapters.

3.1 Participants and setting

The participants in this research project are forty-eight eleven to twelve year-old Japanese and Australian elementary school students. They attend a private school in the Sydney metropolitan area which has two streams of education: a Japanese section using the Japanese government curriculum, and an International section studying the NSW Board of Studies curriculum. Children studying in the Japanese division follow the Japanese National Curriculum, complemented with English language lessons at beginner or intermediate/advanced level. The material used in the English language classrooms is developed by the school and includes interactive tasks as well as lessons from textbooks.

In order to enter the Japanese division, the child has to be fluent in Japanese and the students in this section are usually children of Japanese parents working in Australia for Japanese companies. Japanese citizens are not permitted to have a dual nationality and therefore none of the participating Japanese students has Australian citizenship. Most of the Japanese families are in Australia on a three year contract with their company and they tend to move back to Japan after that time. One of the main aims of the Japanese

stream, which is supported by the Japanese government with teachers and material from Japan, is to support the children's scholastic development in Japanese, so they can adapt easily once back at school in Japan.

The International division classes follow the NSW Board of Studies curriculum and have additional exposure to Japanese language lessons, mixing with the Japanese section for subjects such as Art and Physical Education. In these subjects, both, Japanese and English are used as a language of instruction. Since the children in the Japanese and English streams also meet each other daily outside class, they are accustomed to interacting with each other.

For the students following the Australian (NSW) curriculum, who have English as their first language, the present study uses the terms EL1 (English as language 1) or NS. For the Japanese participants interacting in Japanese (their first language) the label JL1 is used. For the Japanese students learning English as their second language, the term EL2 (or NNS) will be employed.

At the time of the data collection, all participating students were about to finish Year Five and start Year Six. Overall, this research is based on three sets: Firstly, a set of data with twelve children of the Australian class (EL1) interacting with twelve Japanese children speaking English as their second language (EL2), next a set of data originating from twelve students having English as their native language (EL1/EL1 interaction), and finally, a set of data comprising twelve native speakers of Japanese (JL1/JL1).

Data set	EL1/EL2	EL1/EL1	JL1/JL1
Number of participants	24	12	12

Table 3.1. Number of participants in dyadic interactions

The participants' interactions were task-based and the tasks are further described in section 3.2. The EL1/EL2 group includes twenty-four participants for the following reasons: firstly, half of the twelve EL2 attended the English course for beginners, and the other half the English course for intermediate/advanced students. This allows contrasting negotiation of the six EL1 and six EL2 (beginners) with the six EL1 and six EL2 (intermediate/advanced). In addition, negotiation of the twelve EL1 can be

compared to the EL1/EL1 data set consisting of twelve participants and the twelve EL2 interactions can be contrasted with the twelve JL1/JL1 interactions (baseline data). Institutional constraints and insufficient student numbers did not allow for a JL1/JL2 data collection.

At the time of the EL1/EL2 data collection, the International class consisted of eighteen students and the Japanese class had twenty-five students. Fourteen students from each class originally participated. They were selected at random by their teachers. The students of these classes could not be considered for the second and third data collection (English and Japanese native speaker interaction or JL1/JL1 and EL1/EL1) since they knew the tasks. It was therefore decided to collect the data of the native speaker interactions from the students of the following Year Five/Six. Great care was taken to confirm that none of the children participated more than once.

In the following year, the Australian class consisted of twelve students and the Japanese class of sixteen students. The native speaker data were collected from all of them. After listening to all recordings, some of the EL1/EL2 and JL1/JL1 interactions were not considered for data analysis owing to poor sound quality. Moreover, some participants had tampered with the cassette recorders and in two cases only partial recording had taken place. For these reasons, the final EL1/EL2 data set is based on twenty-four participants (twelve EL1 speakers and twelve EL2 speakers), and the EL1/EL1 and JL1/JL1 data sets each comprise twelve participants as well. All data were collected using Macquarie University's ethical research protocol (see 3.3).

Out of the twenty-four EL1/EL2 participants, fourteen were boys and ten were girls. The six EL1/ EL1 dyads consisted of seven boys and five girls, and the JL1/JL1 dyads of eight boys and four girls, totaling twenty-nine boys and nineteen girls. The present study has decided not to look at gender as a variable since research with participants in the same age group has shown that there was no significant difference between mixed dyads and boys- or girls-only dyads (Oliver, 1995a; Pica et al, 1991). The participants were allowed to self-select their partners resulting in a mixture of same sex and mixed dyads per data set. It was interesting to note that there are more male than female students in the Japanese stream of the school. An interview with the Japanese principal revealed that Japanese have a tendency to enrol their boys in the Japanese curriculum

(only offered at this particular school in Sydney) but often send their girls to local Australian primary schools.

Although the researcher considered post-session interviews with the Year Six participants in regard to the findings, the considerable shifts in the student population after the original recordings made this difficult. After finishing Year Six, some of the JL1 participants returned to Japan, about one third of the EL2 participants moved to other high schools, and all of the EL1 participants moved to local high schools since this particular school offers no English high school curriculum. It was also considered more useful to ground this research in primary data, rather than interview data.

3.2 Material

The communicative approach to second language teaching (CLT) assumes that learning occurs through interaction (for example, Bitchener, 2002, Jacobs & Farrell, 2003; Richards, 2005). Many text books and lesson plans therefore incorporate tasks that encourage learners to speak to each other and tasks are seen as an important feature of CLT helping to promote language learning (Ellis, 2003: 27; Ljungdahl 2005).

An examination of the methodologies of above-mentioned SLA negotiation studies reveals that most of the data originate from interactions recorded while the participants do certain tasks. There seems to be a general consensus that communicative tasks, through their provision of interaction and opportunities for negotiation, are beneficial for language learning, and empirical evidence has shown that dyadic or peer group activities encourage learners to produce comprehensible input and output (see Bitchener, 2004; Bygate, 1999; Cardoso, 1999; Nunan, 1996; Pica, Kanagy & Falodun, 1993). Group work is seen as beneficial to language development since learners are given the opportunity to produce more language than in teacher-fronted activities. Students also tend to negotiate more when talking to their peers (Brooks, 1992; Ellis, 1997 and Long, 1990).

In their revision of the effects of communicative tasks on negotiation, Pica et al (1993) report that tasks leading to negotiation have the following characteristics:

- each participant has a different part of the information which must be exchanged and used to accomplish the task
- the participants are required to request and provide this information to each other
- the participants have the same goal, and
- only one acceptable outcome is possible in order to reach this goal.

According to Pica et al (1993), these conditions are best fulfilled by jigsaw tasks with less negotiation taking place in decision making, problem solving or opinion exchange tasks. Dyadic activities in which both participants hold essential information appear to give learners more opportunities to negotiate unfamiliar input and to modify their output. This is confirmed through empirical evidence in a study by Assis (1997), in which the amount of negotiation work was around twenty percent higher in jig-saw and information gap tasks than in opinion or decision making exchanges. Assis' findings also validate Pica et al's (1993) point that more negotiation takes place in tasks where participants have the same goal and only one acceptable outcome to reach this goal.

The participants' motivation to accomplish a task is also essential and the interest the learners take in the task plays an important role in their production of modified input and output. Foster (1998) found that her learners in small groups showed little interest in the task, a factor leading to limited negotiation. Ellis and Heimbach (1997) conceded that the unwillingness of their participants to negotiate was also related to the nature of the task and that not all tasks promote language production. Their advice was that tasks should be chosen carefully, ensuring that they correspond to the intellectual level of the participants and are of interest to all of them.

Although the original plan was to collect data from the art classes (in joint lessons with Japanese and English interactions), the recording proved to be challenging and it was difficult to achieve a focus on negotiated interaction. The researcher therefore decided to use dyadic tasks promoting negotiated interaction using the criteria suggested by Pica et al (1993). To choose appropriate tasks for the intellectual level of the participants was not an easy feat and the researcher spent quite some time examining available task material and discussing their suitability with teachers working with children in the same age group as the participants. Finally, a pilot study with children in the selection of a suitable task and a warm-up activity.

The warm-up activity (called 'Kim's Game') required the respective dyads to work on a list of items they have previously seen together. The pilot study showed that the children greatly enjoyed this activity and it was used as a starter before the main data collection sessions. All interactions were recorded and transcribed. The data focused on in this research are taken from task-based interactions during a jigsaw game with fourteen rows of pictures, called 'Picture Game' (taken from Palmer, Rodgers & Winn-Bell Olsen, 1985).

Each row comprised four different drawings of a similar situation and the participants had to determine which picture was marked with a dot on their partner's sheet without looking at each other's piece of paper. In order to do the task, the participants had to take turns asking questions and giving information about the pictures. Hence all four conditions mentioned by Pica et al (1993) were met: the students had to exchange information to accomplish the task, they had to request and provide this information, they had the same goal and there was only one possible outcome to the task. A sample set of the task is in Appendix A.

The warm-up and 'The Picture Game' task interactions lasted about forty minutes and all conversations during this time were audio-taped. 'The Picture Game' task interaction took up about half of the time. Instructions for the tasks were given in English and Japanese and a video camera was used. The video was helpful for discerning overall features of the students' activities but was of limited use for specific details of the individual interactions. The researcher also took notes during all sessions, for example of non-linguistic activities such as drawings or gestures. For the transcription of the data which took over two hundred hours, a tape recorder that can be operated by foot was used.

It is important to point out here that there are a significant number of data extracts included in the chapters of this study and that in order to better appreciate the children's interactions, it may be of interest to refer to the corresponding picture rows in Appendix A.

3.3 Data collection procedures

Firstly, it was essential to obtain permission from all parties involved. Macquarie University requires all research involving human participants to be approved by the Ethics Review Committee and to be agreed to by the institution and participants involved. Furthermore, an additional yearly and final report has to be handed in to be approved by the Ethics Review Committee (reference HE10/8/1997-PD00362-12/2/2003).

After receiving informed consent from the university as well as from the school, children and parents, the participants' curricula and institutional constraints had to be taken into consideration. The teachers suggested the data be gathered in the classrooms during a time slot usually reserved for discussing matters of general interest.

In regard to the setting, many studies investigating NS/NNS interaction have not used classroom settings, but a laboratory-like environment. Those that have examined classroom data have mainly targeted NNS/NNS or learner/teacher interaction (such as Donato, 1994; Doughty & Varela, 1998; Foster, 1998 and Met, 1998). The participants in some of the NS/NNS studies (for example, Ehrlich, Avery & Yorio, 1989; Futaba, 1996; Long, 1983a) met only for the purpose of recording the research data. In Oliver's (1995a) study with children of the same age, the students completed their tasks sitting at desks with forty centimetres high barriers placed between them. This was deemed to be necessary in order to avoid 'cheating', but has little resemblance to the environment in which learners usually interact.

In the present study, a classroom used by the students in joint lessons was set aside to allow for the recording of ten to twelve participants at a time. It would have been too noisy to include more at one time. In addition, the researcher had only six audiorecorders at her disposal. Since peer interaction in dyads produced the most negotiation, the children were asked to work in pairs. The dyads were sitting across from each other at separate tables and an audiotape recorder was placed on each table. The recorders were switched on from the very beginning of the sessions and the participants did not appear to take much notice of them. The recording of the EL1/EL2 data took place on three consecutive Tuesdays and lasted for about forty to forty-five minutes respectively. The researcher was present to explain the tasks and to answer the students' questions if necessary. As mentioned earlier, the data from Australian (EL1/EL1) and Japanese (JL1/JL1) interactions were collected at the same school from students of the same age group after an interval of about twelve months. This resulted in three sets of data based on the same task: firstly, interactions between native and nonnative speakers of English (EL1/EL2), then native speakers of English (EL1/EL1) and native speakers of Japanese (JL1/JL1). The researcher would like to mention that after the participants started out with their tasks, all language was task-related.

3.4 Data analysis

This study is based on cross-sectional data collection. Longitudinal data collection, examining any long term acquisitional effects, was not considered since too many other variables intervene over time which do not allow learning to be traced back to just one specific negotiated interaction. Depending on the aim of the research, SLA studies either favour quantitative (or experimental) or qualitative methodologies for their data analysis. Quantitative studies are usually motivated by a hypothesis leading to an experimental design of the research and the data is interpreted through statistical analyses. Qualitative studies prefer interpretive approaches to their data and are often based on a smaller sample population. An excellent illustration of quantitative and qualitative paradigms is given in Larsen-Freeman and Long (1991) or in a more recent overview by Mackey and Gass (2005). However, it is often difficult to make a clear-cut distinction between quantitative and qualitative research and Van Lier (1988: 56) proposes that the different approaches taken by researchers can be placed on a continuum reaching from 'non-intervention' to 'intervention' and from 'unstructured' to 'structured' observation.

The approach chosen as most appropriate for the present study is comparable to Seliger and Shohamy's (1989) 'descriptive research'. In their classification of SLA research methods Seliger and Shohamy differentiated between three approaches: qualitative, descriptive and experimental (or quantitative). Descriptive research has a narrower scope of investigation than qualitative research and it begins with preconceived hypotheses. This allows for the gathering of data with a specific focus and to define the goals of the research in advance. However, it differs from quantitative research in that it looks at existing groups of subjects rather than at a selected population. A descriptive research design contains elements from qualitative as well as quantitative research by being both heuristic and deductive at the same time. It includes descriptive and quantitative approaches and relates to specific foci derived from hypotheses and empirical research in second language acquisition.

Further methods allowing for a thorough examination of spoken interaction are Discourse Analysis and Conversation Analysis (DA and CA respectively). Discourse analysis looks at linguistic forms and the communication process as a whole. Levinson (1983) proposes that DA allows 'the isolation of basic categories or units of discourse and the formulation of a set of rules stated over those categories, delimiting well-formed sequences of categories from ill-formed sequences.' (p. 286). Seminal DA studies by Sinclair and Coulthard (1975) specifically examined recurring patterns of interaction between teachers and their pupils. However, the data examined in the present study are of a different nature since the focus is on negotiated peer interaction where both participants need to collaborate in order to understand what is meant.

CA looks at talk spotlighting local aspects of interaction and the joint effort of participants. This approach is particularly well illustrated in research by Sacks, Schegloff and Jefferson (1974). Transcriptions of utterances include features such as restarts and mumbling, speaker-overlaps, pauses, laughter or vocalisations such as 'Oh' and 'Um'. McCarthy (2001: 104-105) proposes that the significance of both, DA and CA, is that they are able to account for the creation of meaning in spoken interaction without reference to syntactic rules often applied by teachers to written texts.

The present study hence examines the data using quantitative as well qualitative approaches, as proposed in the descriptive research approach by Seliger and Shohamy (1989) and applied by other studies with a similar focus and setting (Deen, 1997; Foster, 1998; Foster & Snyder-Ohta, 2005). Quantitative analyses included in the present study are presented in numbers and percentages, discerning prevailing patterns and allowing for a transparent representation of the data. The qualitative analyses of the data revealed additional functional and formal categories, as well as the relevance of repetition and pauses, as illustrated in sections 3.8 - 3.10.

3.5 Data transcription

The first step towards an analysis consisted of transcribing all dialogues in each of the three data sets. A number of transcribing conventions were examined (for example, DuBois, 1991; Jefferson, 1989; Tannen, 1989) and for the purpose of the present research DuBois (1991) was found to be most suitable. For a more focussed analysis at the sentence and turn level, approaches and terminology to data analysis deriving from Conversation Analysis are used, such as the turn construction unit (TCU). As for the Japanese data, the romanization style proposed by Neustupny (1984) was adopted, and for the inter-linear gloss, Hinds, Maynard and Iwasaki (1987: 307) transcribing style for the word-for-word translation of Japanese into English is used. The Japanese excerpts in this study also include the original Japanese script. The transcription styles adopted from DuBois (1991) and Hinds et al's (1987) conventions are to be found in Appendices B and C.

In order to achieve a maximal representation of the interaction, the initial transcription of each dialogue was refined while listening at least twice to every dialogue. This resulted in a transcript including pitch, laughter, vocal noises and pauses. Pauses inbetween turn taking are included after the last speaker's turn although this does not mean the pause is attributed to that speaker. Pause length is indicated in micro-pauses (0.3 seconds and less), half and full seconds.

The next step towards analysing the interaction for negotiation was to define the length and complexity of the dialogues and in this regard, a number of ways of coding have been proposed. In their seminal paper on turn-taking in conversation, Sacks, Schegloff and Jefferson (1974) propose the 'turn-construction unit' (TCU), which includes 'sentential, clausal, phrasal, and lexical constructions. Instances of the unit-types so useable allow for a projection of the unit-type under way, and what it will take for an instance of that unit-type to be completed' (p. 702). Maynard (1990) found that Japanese speakers tend to produce fragments of talk surrounded by pauses and she calls these 'Pause-bounded Phrasal Units' (PPUs). The average length of PPUs in her study is 2.36 words.

Brown (1973) measured the amount of language produced by younger children by the 'Mean Length of the Utterance' (MLU). Pica, Halliday, Lewis and Morgenthaler (1989)

introduced a semantic unit called 'c-unit' for 'words, phrases and sentences, grammatical and ungrammatical, which provide referential or pragmatic meaning' (p. 72). A problem with the c-unit appears to be a lack of examples of how to segment extended oral texts. Moreover, grammatical and intonational features are not accounted for.

A survey by Foster, Tonkyn and Wigglesworth (2000: 360) suggests that the T-unit is very popular for coding written and spoken data. Hunt (1966) defines the T-unit as a main clause plus any other clauses that are dependent upon it. Foster et al (2000) argue that the inclusion or exclusion of 'non-clausal structures' and 'sentence fragments' in T-units is not made explicit. Therefore, they propose an 'Analysis of Speech Unit' (AS-unit) which is based on the T-unit but also allows for the inclusion of features characteristic of spoken data.

Foster et al (2000) specifically underline the suitability of this unit for 'spoken first or second language data seeking to measure the frequency of certain discourse features such as confirmation checks, clarification requests or self-correction' (p. 354). A previous study by Foster (1998) analyses negotiated interaction in a classroom setting, and Foster's familiarity with this specific type of discourse explains the adequacy of AS-units as a tool of analysis for this research. AS-units are useful because of their potential to compare the amount of talk in native speaker data sets and in NS/NNS interaction.

An AS-unit consists of an independent clause and all subordinate clauses and nonclausal structures attached to or embedded in it. Furthermore, an AS-unit can consist of an independent sub-clausal unit, such as one or more phrases that can be elaborated to full phrases by recovering ellipted elements. The main clauses of compound sentences are counted as separate units. As specified by Foster et al (pp. 365-366), utterances like 'Yes' or 'Well done' are also counted as separate AS-units.

Subordinate clauses within an AS-unit are preceded by a double colon (::) allowing for a better understand of the complexity of the speech event. A subordinate clause consists of a finite or non-finite verb plus at least one other clause element: subject, object, complement or adverbial (Foster et al, 2000: 366-367). In some speech events highly complex dependent clauses may occur and thus render comparison in AS-units less relevant, however, in the present data, the 12-year old participants primarily used simple sentences consisting of one main clause. Complex sentences (including a main clause and one or more subordinate clauses) rarely occurred in their negotiated interaction.

The treatment of laughter and back channeling is not further explained by Foster et al (2000) but Ford and Thompson (1996) state although 'back channel turns' and laughter are not equivalent to a 'full turn' from an interactional point of view, 'they are similar from the point of view of understanding the units of conversation which are validated by next speaker turn onset' (p. 152). In the present study, the onset of laughter by another speaker and 'back channels' are treated as separate AS-units since they do represent a non-lexical contribution to the interaction by the listener.

Representationally, AS-units (as proposed by Foster et al 2000) are separated by a vertical line (|). Rising intonation is indicated by a slash (/) and a falling intonation with \setminus The length of pauses are indicated by () brackets and false starts are framed by {} brackets. From here onward, data excerpts are presented using these symbols which are also listed on the data transcription sheet included in Appendix B. In Japanese examples, excerpts are represented in Kanji (Chinese ideographic script) and in the Japanese syllabaries hiragana or katakana, with their Romanized transliteration and the English free translation underneath. Interlinear gloss (abbreviations as explained in Appendix C) is only included if an understanding of the respective Japanese morphemes is relevant for the reader.

All AS-units from the three sets of data were numbered in order to show the respective length of each of the 24 dialogues in terms of AS-units. The six EL1/EL1 dyads are D1-D6 and the six JL1/JL1 dyads are numbered D7-D12. The twelve EL1/EL2 dyads are separated according to the level of the EL2 into D11-D18 (EL1/EL2 beginner level) and D19-D24 (EL1/EL2 intermediate/advanced level). The English level is decided on by rigorous internal school tests and the school's separation into these levels was accepted by the researcher as valid and relevant. In order to allow for an insight into an entire dialogue per data set, Appendices D, E and F include one EL1/EL1, one JL1/JL1 and one EL1/EL2 sample data set transcript respectively.

The analysis of AS-units, as well as the calculations of their amount in the figures in the following chapters, have been examined by a fellow researcher and were found to be correct. The next step consisted of a thorough examination of all transcribed data in order to identify AS-units related to 'negotiation of understanding'. After isolating all turns related to negotiated interaction, the researcher had to decide on the terms used in the present study for these segments and they are explained in the next sub-section.

3.6 Definitions of turns and sequences of negotiated interaction

Objective criteria are necessary to identify the segments of negotiated interaction. With Long's (1983a) typology it remained unclear, within how many turns understanding is reached. As an overall model, the Gass and Varonis (1985) proposition of 'trigger', 'indicator', 'response' and 'reaction to the response' allows for the framing of the negotiation process as a whole and their terms are adopted by this study.

In some of the studies looking at negotiated discourse, only triggers by the nonnative speaker were considered (for example, Iwashita, 2003; Long 1983a, b; Oliver 1995a and Yamaguchi et al 1999). This study will take into account triggers by nonnative speakers and native speakers, since either can lead to further language development by the NNS. Sometimes, instead of 'trigger', the term 'trouble source' (employed by Scheggloff, Jefferson and Sacks, 1977) is used. Both terms refer to the turn causing the start of a negotiation sequence.

Some negotiated sequences in the present study include a turn beyond the 'reaction to the response' which is not allowed for in the above-mentioned research. The researcher labeled this final turn 'resolution'. Extract 3.1 illustrates a sequence stretching over five turns. In terms of representation, note that each excerpt is preceded by the number of the chapter and the sequential number (for example: 3.1) and followed by the data set type (i.e. JL1/JL1), the dyad number (D 11) and then the original line numbers in the transcript (for example, 2-7). The line numbers here refer to the transcripts of negotiation interaction and not the overall interactions. Moreover, each AS-unit is framed by a vertical line. All excerpts are in a smaller font.

(3.1) [JL1/JL1, D 11: 2-7]:

1.A {えっとね、}どっちか片方が指していますか。

| {etto ne} docchi ka kata hou ga sashite imasu ka | 'well which one points to the other one'

trigger

2. T	えっ。	
	<i>eh/</i> 'what?'	indicator
3. A	what: どっちか片方が相手を指していますか。	
	docchi ka kata hou ga aite o sashite imasu ka 'does either one of them point to the other one?'	response
4. T	{えっと、}それ男の人ですが。	
	{etto} sore otoko no hito desu ga 'well, it's the man'	reaction to response
5. A	うん、はい。	
	un hai\	resolution

As already discussed in section 2.3, negotiated interaction can continue beyond three to five turns, depending on how long it takes the individual speaker to clarify their message. If the 'response' is the catalyst of further negotiation, some studies (for example, Iwashita, 2003; Oliver, 1995a; Yamaguchi et al, 1999) consider this to be the 'trigger' for a separate 'negotiation sequence'.

'um yes' ((in the sense of 'your turn'))

The present study prefers to examine segments of negotiated interaction as a whole in order to discern whether clarification took place within three, four or five turns or over a longer stretch of discourse. Therefore, a distinction is made in the data analysis between a 'simple sequence' and a 'complex sequence', stretching over more than one negotiation cycle.

A 'simple sequence' includes all negotiation moves, beginning with the 'trigger', then the 'indicator' and the 'response'. As shown in 3.1 above, these turns can be followed by a 'reaction to the response' and a 'resolution'. If understanding is not achieved within a 'simple sequence' and the 'response' or the 'reaction to the response' is the catalyst of a new negotiation cycle, the term used for longer cycles in the present study is 'complex sequence'. Since there are more 'complex sequences' in EL1/EL2 negotiated interaction, this study examines the number of AS-units in simple and complex sequences separately in order to better understand variations between speakers and data sets. Further discussion and illustration of sequences takes place in Chapter Four. The criteria discussed so far are related to the steps necessary to identify where and how frequently negotiation takes place in spoken discourse. The terms 'trigger', 'indicator' and 'response', as well as the optional moves 'reaction to response' and 'resolution' were introduced to specify the negotiation components. This was followed by an examination of the complexity of sequences. However, AS-units of simple and complex sequences only indicate the occurrence and frequency of negotiation of understanding without giving further information about its forms, functions or other salient features.

Before discussing the present study's taxonomy of functions, as well as other features of negotiated interaction from section 3.8 onwards, the following section (3.7) gives a brief overview of forms in both languages, with a focus on how Japanese forms differ from English.

3.7 Syntax in English and Japanese

Since the data analysis involves texts in English and Japanese and comprises examples in both languages, it is relevant to explain some of their syntactical forms. In forms of sentence types, negotiated interaction in all three sets of data consists of declaratives (see sub-section 3.7.1), interrogatives and imperatives (in sub-section 3.7.2). As there is typological variation between these two languages, some forms need to be explained in order to better understand the speakers' respective backgrounds. However, the following examples are not meant to be exhaustive and for a fuller analysis of English grammar, please refer to Wardhaugh (1995) and for Japanese linguistics to Maynard (1997b) and Tsujimura (1999).

3.7.1 Declaratives

Declaratives in English and in Japanese can take the form of a full sentence structure or be elliptic. A sentence may consist of one or more clauses. Clauses can be classified in various ways, for examples, in terms of the clause elements (subject, verb, etc), or in terms of their basic constituent parts.

The clause elements are subject (S), verb (V), object (O), complement (C) and adverbial (A). Adverbials are usually optional, that is, they may be omitted without

making the clause unacceptable (Leech & Svartvik, 1992: 211). The six obligatory elements of a declarative clause in English are SVC, SVO, SVOV, SVOO, SVOC, and SV. Respective examples (taken from Leech & Svartvik, 1992: 212) are:

(3.2)

- 1. Mary is here. (SVC)
- 2. Everybody admired her new car. (SVO)
- 3. They told me to stay. (SVOV)
- 4. She gave all the children presents. (SVOO)
- 5. They considered the car too expensive. (SVOC)
- 6. The children laughed. (SV)

The basic constituent parts of a sentence in English include a subject phrase (NP) and a predicate (verb) phrase (VP). Wardhaugh (1995: 138) lists the following example:

(3.3)1. The sheep (NP) eat grass (VP)

Internal constituent structures can be described as follows (Wardhaugh, 1995:137-138):

a. NP \rightarrow (Det) + N b. VP \rightarrow V + NP

The parentheses indicate that the determiner is an optional constituent of a noun phrase. However, the example of the above verb phrase includes two obligatory constituents: a Verb (in this case transitive) and a NP. Noun phrases can minimally consist of a single word – the noun or pronoun.

The typical Japanese declarative sentence pattern also comprise a subject phrase (NP) and a predicate (verb) phrase (VP) (example from Tsujimura, 1999: 164):

(3.4)

- 1. Taroo-ga (NP) gakko de atarashii hon-o katta (VP)
- 2. Taroo-Nom school-at new book-Acc bought
- 3. 'Taro bought a new book at school.'

The above verb phrase can be subdivided into: a postpositional phrase (PP): gakko de (school-at); another NP (including an adjectival phrase or AP): atarashii hon-o (new book); and the verb katta (bought). The basic pattern of declarative clauses in Japanese is SOV, with the verb always being at the end of a clause.

The Japanese phrase structure rules proposed by Tsujimura (1999: 166) are:

- a. NP VP
- b. NP \rightarrow (NP) (AP) N
- c. $VP \rightarrow (PP) (NP) (PP) V$
- d. PP \rightarrow NP P

The categories in parentheses mean that they are optional. Note that if a verb phrase (VP) includes a number of constituents, the verb comes last. Except for the restriction that the verb is at the end of a sentence, the relative order among other constituents is flexible in Japanese (Tsujimura, 1999: 186).

As opposed to English, Japanese uses 'case particles' such as -ga for the nominative (Nom), -o to indicate the accusative (Acc), -ni for the dative (Dat) and the genitive (Gen) particle -no. Furthermore, topics are marked with the particle -wa (Top) (Tsujimura, 1999: 134). The present study employs Hinds et al's (1987: 307) transcribing style for the word-for-word translation of Japanese into English (for interlinear gloss, see example 3.4, line two).

At times, utterances are cut off and the full meaning comes out paratactically over a number of turns. Gardner (2001) uses the term 'collaborative completion' for turns which are completed by the other speaker. In order to make a distinction from elliptic utterances, the present study uses the term 'turn-sharing' for other-completed utterances.

Moreover, in conversation, short statements ('attention signals' or 'aizuchi feedback') are made in order to express affect or attention. They may consist of particles such as 'Mm hm', 'Uh huh' or 'Yeah' in English (Gardner, 2001) or *mm, ee* 'Yeah', *aa* 'Ah' or *so desu, hai* 'Yes' in Japanese (LoCastro, 1987). Their functions are further discussed in section 3.8.

3.7.2 Interrogatives and imperatives

English interrogatives incorporate two basic categories: Wh-Questions and Yes/No Questions. A subset of Yes/No Questions in English are tag questions. Wh-Question words (including how) can be used in sentences or the question word can occur alone. When the Wh-word or phrase is the subject of the question, there is the normal NP – VP order (for example: 'Who is coming?'). In all other cases there is subject-verb inversion and the necessity to add *do* if there is only one verb in the verb phrase, such as 'What did they want?' (Wardhaugh, 1995: 125-130).

English Yes/No Questions can be formed by using 'do' or by inverting the word order and putting an auxiliary or modal in sentence-initial position as in 'Do his brothers like football?'or 'Will they be coming?'. They can also be produced by attaching a tag- question, consisting of an auxiliary verb and a pronoun at the end of a main clause (as in 'He hasn't left, has he?') or by creating a rising intonation question, that is, using a rising interrogative tone with a declarative sentence as in 'He has left?' (Leech & Svartvik, 1992: 283-284).

In Japanese, the word order in Yes/No Questions is the same as in a declarative sentence (see 3.5), except that the question particle ka (Q) is added at the end (3.6).

(3.5) *Tanaka-san ga ashita kimasu*Mr. Tanaka-Nom tomorrow come
'Mr. Tanaka will come tomorrow.'

(3.6)
Tanaka-san ga ashita kimasu ka
Mr. Tanaka-Nom tomorrow come Q
'Will Mr. Tanaka come tomorrow?'

The resulting sentence structure hence is S \rightarrow NP VP ka (Tsujimura, 1999: 181).

Wh-Questions in Japanese follow a similar pattern (Tsujimura, 1999: 184-185): the interrogative words replace NPs (3.7.) at the same position, and the question particle ka is added at the end of the sentence (such as in 3.8).

(3.7)

Hanako-ga kinoo tomodachi to sushi o tsukurimashita. Hanako-Nom yesterday friend with sushi-Acc made 'Hanako made sushi with her friends yesterday.'

(3.8)

Dare-ga kinoo tomodachi to sushi o tsukurimashita ka. who-Nom yesterday friend with sushi-Acc made Q 'Who made sushi with (his/her) friend(s) yesterday?'

The Japanese examples show that subject-verb inversions or 'do' constructions are not necessary. Furthermore, it is important to note that in contrast to English, there is no rising tone at the end of an interrogative. Questions are indicated by the particle ka and their intonation is usually leveled or falling. However, repetitions (for example in confirmation checks) can have a rising intonation.

In regard to imperatives, the English imperative typically lacks a subject and the verb is the uninflected base form such as 'Sit down!' or 'Tell me your name' (Wardhaugh, 1995: 123). According to English politeness conventions imperatives tend to sound abrupt unless they are toned down by signals of politeness such as 'Please' (Leech & Svartvik, 1992: 216).

In Japanese, there are variations in honorific forms according to the social dimension of the respective speakers. The plain form of the imperative is obtained by adding 'e' or 'ro' to the stem of the verb. For polite forms 'nasai' is added to the verb or the equivalent of 'please' *–te kudasai*. For example, the equivalent of 'Wait!' in these three imperative forms would be 'mate', 'machi-nasai' and 'matte-kudasai' (Gakken, 1978: 110).

Japanese possesses an extensive honorification system (Tsujimura, 1999: 363), which is often divided into the following classes: 'honorific', 'humble', and 'polite'. 'Honorific forms' are used in situations where the individual referred to is to be respected, for example, has a higher rank than the speaker. In these situations, 'humble forms' are employed by the speaker when referring to him/herself. Otherwise, the more neutral 'polite form' is used.

The level of politeness in all sentence types is reflected in the verb form. For an honorific form, *o* precedes the verbal root and *ni naru* follows it. The prefix *o* together with the suffix *suru* indicates a humble form, and a verbal root suffixed by *masu* reflects the polite form (Tsujimura, 1999: 364).

Besides the forms of sentences in negotiated interaction, it is also important to gain a better understanding of their functions. The following section hence examines the respective terms employed in previous research and clarifies their use in the present study.

3.8 Focus on functions

This section will firstly look at Long's (1981, 1983a, b) seminal work on the components and function of negotiation. As discussed in section 2.1, Long was one of the original researchers to analyse the functions of negotiated interaction between native and nonnative speakers of English and he suggests that when interlocutors experience difficulties in understanding they 'negotiate meaning' by using 'clarification requests', 'confirmation checks', 'comprehension checks', and 'self- and other-repetition'. Since these terms are also employed in the present study, the following paragraphs firstly render Long's original proposition. This is followed by an exposé on the interpretation of these terms in the present study including additional categories and examples. Since this study analyses negotiated interaction not only of NS/NNS of English but also of native speaker interaction in English and in Japanese, the examples will include excerpts from all three data sets (EL1/EL2, EL1/EL1 and JL1/JL1).

Long's (1983a: 136-137) original definitions of clarification requests, confirmation and comprehension checks are:

Clarification requests: Any expression by a native speaker designed to elicit clarification of the interlocutor's preceding utterance(s). They are mostly formed by questions... and may consist of Wh or Yes/No questions as well as uninverted (intonation) and tag questions, for they require that the interlocutor either furnish new information or recode information previously given... While questions are the most frequent form of clarification request, they are also effected by statements like *I don't follow* (I don't understand) and imperatives like *Try again*. (Long 1983a: 137, original emphasis)

Confirmation checks are defined as any expression by the native speaker immediately following an utterance by the interlocutor which is designed to elicit confirmation that the utterance has been correctly heard or understood by the speaker... Confirmation checks are always formed by rising intonation questions, with or without a tag. They always involve repetition of all or part of the other's preceding utterance. They are answerable by a simple confirmation (*Yes, Mmhm*)... and require no new information from the interlocutor. (Long 1983a: 137, original emphasis).

Comprehension checks, such as *Right*?, *Okay*? and *Do you understand what I mean*? ... ensure that one's own prior utterance has been correctly understood by the interlocutor. They can also consist of tag questions and repetitions of all or part of the same speaker's preceding utterance. (Long 1983a: 136, original emphasis).

Other categories in Long's (1983a) framework are self- and other-repetition, and these repetitions can include 'partial or exact or semantic repetition (i.e. paraphrase)' (p. 138). Long's typology of clarification requests, confirmation or comprehension checks and repetition has been incorporated in a number of research studies such as in De la Fuente (2002), Deen (1997), Yamaguchi et al (1999), Iwashita (2003), Mackey (1999), Oliver, (1995a, b; 2002) and Williams et al (1997).

However, the present research found that confining the data to Long's typology for the analysis of negotiated interaction does not adequately account for all clarification attempts. It was felt that these categories are too general and limiting for an in-depth analysis of an entire negotiation sequence. Firstly, only native speaker initiation of negotiation is examined and indicators by the nonnative speaker appear not to be considered. In order to allow for a better understanding of the negotiation process, this study analyses all turns (by native and nonnative speakers) indicating partial- or non-understanding.

There are also areas within the categories that need to be refined. For example, Long's (1983a: 137) clarification requests appear in the second turn (or 'indicator'), immediately after the 'trigger' which started the negotiation, and consist mainly of interrogatives. However, requests requiring the interlocutor 'to furnish new information

or recode information previously given information' do not always take the form of interrogatives but can also consist of a variety of statements requesting the other speaker to clarify their proposition. For example:

(3.9) [EL1/EL1, D4: 46-51]

1. S	does he have a beard and a moustache/	trigger
2. T	ye=s (0.5)	
3. →	but there's two with a beard and a moustache	indicator
4. S	oh (1)	
5.	$ $ {is the mous} {eh} is the beard connected to the moustache/	response
6. T	yes it is\	reaction to response
7. S	okay ((ticks correct picture))	resolution

In the present research, requests for clarification in a declarative form (as illustrated in line three above) are also included in clarification requests. Otherwise, as stipulated in Long (1983a), clarification requests include Wh-, Yes/No, uninverted intonation and tag questions, as well as statements such as 'I don't understand'. Moreover, general 'requests for repetition' such as 'Pardon?', '(I) beg your pardon?', 'Excuse me?' or 'Sorry' also form part of this category. However, imperatives (included in Long's clarification requests) are listed in a separate category in order to better understand their role in negotiation sequences.

This study also allows further insights into the formal features of clarification requests since an additional analysis shows the percentages of declaratives, Wh-Questions or question words only, Yes/No Questions and requests for repetition. Questions and declaratives can include a form of repetition (not answerable by 'Yes' or 'No').

Confirmation checks in this study consist of a partial or exact repetition with rising intonation or a paraphrase including part of the other speaker's utterance and are answerable by a confirmation or negation (as in Long 1983a: 137). Leech and Svartvik (1992: 115) call these questions where the speaker is asked to confirm or repeat some information 'echo questions'. Echo questions simply repeat part or all of what has been said, using rising question intonation. The following example of a 'confirmation check' is taken from the Japanese native speaker interaction:

Y じゃ、男の人が女の人に指を指していますか、男の人だけ。 |ja (0.5) otoko no hito ga onna no hito ni yubi o sashite imasuka :: otoko no hito dake | 'well (0.5) is the man pointing to the women :: just the man' M → 男の人だけ。 | otoko no hito dake- | (0.5) 'just the man' Y はい。

| hai | 'yes'

The intonation in the confirmation check in line two is leveled showing that confirmation does not always take place with a rising tone. Confirmation checks and their prosody are discussed in more detail in the next chapter, as well as in the repetition chapter.

Comprehension checks in the present research consist mainly of repetitions of one's own prior utterance. However, comprehension checks such as 'Do you know what I mean?' or 'Right?' (as suggested by Long 1983a: 136) rarely occur in this study. Clarification requests or confirmation and comprehension checks usually take place in the indicator, which is the turn after the utterance triggering the negotiation. Long's typology does not elaborate on how to deal with responses to indicators, unless they are self- or other repeats.

Usually comprehension is assured by the speaker triggering the negotiation with an utterance clarifying their own trouble source. Deen's (1997) definition for repair of the speaker's own source of trouble is 'trouble clarification' and the most frequent type of 'trouble clarification' found in her study is repetition including elaboration (Deen, 1997: 209). The present study uses the term 'clarification responses' or 'clarifying responses'. An example of a 'clarifying response' (mainly answering clarification requests) is to be found in 3.9, line five. In order to allow for a better understanding of how trouble sources are solved, 'clarifying responses' are further sub-divided into their forms such as elaborated and paraphrased questions, declaratives including a repetition as well as questions and declaratives not including a repetition.

Responses to confirmation checks mainly consist of Yes/No answers (as in line three in 3.10). They can include a repetition of what is confirmed or disconfirmed. Pica et al (1991: 376) included such answers in a 'confirmation or acknowledgement' category but since they also disconfirm, the present study uses the term 'Yes/No' answers for responses falling into this category.

In addition, the present study also transcribed 'feedback signals' or 'aizuchi feedback' (LoCastro, 1987) which express affect or attention. They can consist of particles such as 'Mm', 'Mm hm', 'Um' 'Uh-huh', 'Yeah', 'Right' or 'Okay' (Leech & Svartvik, 1992: 114) Gardner (2003) refers to the set of utterances produced by listeners as 'response tokens' and underlines their importance in interactive talk. He explains sounds like 'Mm hm' or 'Mm' as 'continuers' or 'acknowledgement' tokens and 'Okay' as a 'change of activity' token, used to mark the end of one sequence and preparedness to move on. The use of 'Okay' in English as an indication of moving on to the next activity is also observed in this study.

Similar sounds or interjections are called *aizuchi* in Japanese. *Aizuchi* consist of sounds such as *mm*, *ee* 'Yeah', *aa* 'Ah' or *so desu*, *hai* 'Yes'. For a fuller discussion of *aizuchi* please refer to LoCastro, 1987; Maynard, 1997a, b, and White, 1989. The term used in this study for feedback in both English and Japanese is 'feedback signals'. 'Feedback signals' are only included if they are part of a simple or complex negotiation sequence.

In sum, this first introduction to the findings shows that the functions of the components of meaning negotiation are either requesting clarification, confirming and checking comprehension, clarifying answers, expressing agreement or disagreement and signaling feedback. These functions, as well as an analysis of formal features of clarification requests and 'clarifying answers', will be used by this study as a framework for the data analyses in Chapters Five and Six.

Most of these categories include a form of repetition and the inclusion by some studies of repetition in several of the categories, as well as in a separate 'self- and otherrepetition' category is confusing. For example, De la Fuente (2002), Yamaguchi et al (1999), Iwashita (2003), Oliver (2002) and Williams et al (1997) refer to repetitions within confirmation and comprehension checks as well as in a separate 'repetition' category without further elaborating on their forms. To include repetitions in checks and in a separate category makes it difficult to understand the precise nature of repetitions and obscures their frequency. In order to better understand the overall role of repetition, it is more accurate to investigate Same- and Other-speaker repetition as separate phenomena. The present study presents such an analysis in Chapter Seven and the following section clarifies the forms of repetition and the terminology used.

3.9 Repetition in negotiated interactions

Firstly, it is important to determine whether the repetition is partial, exact, elaborated or paraphrased; and whether the terminal pitch is rising (/), level (-) or falling (\). This section explains the forms and characteristics of repetition by using examples from the English and Japanese data of the present study. Partial repetition in English is shown in the following exchange:

(3.11) [EL1/EL1, D6: 69-72]

1. K		is it shaped like a canoe/ (/ = rising intonation)
2. E	\rightarrow	a canoe/ (0.5)
3.		yeah-
4. K		okay

Here, K's question in line one triggers a partial repetition of the noun phrase (or 'confirmation check') by E in line two. Since K remains silent during the short pause (0.5 seconds), E continues in line three with an acknowledgement. K then identifies the correct picture and by saying 'Okay' hands the turn back to E and the activity continues. A similar example of a partial Other-speaker repetition in Japanese was illustrated in 3.10, line two.

Kim (2002: 58) notes that reduplication (identical wording) of an utterance mainly occurs when the utterance of the other speaker is short or consists of a single word such as 'Yes' or 'No'. This is also confirmed in the present study and illustrated in extract 3.12 from the Japanese data:

(3.12) [JL1/JL1, D6: 32-35] 1.K そうです。

| sou desu\ |

		'that's correct' (meaning 'yes')
2. M		え-。
		<i>eh</i>
		'eh?' (or 'what')
3. K		そうです。
	\rightarrow	sou desul
		'that's correct'
4. M		そうです。
	\rightarrow	sou desu
		'that's correct'

M requests clarification in line two with the sub-lexical question word 'Eh?', and exact Same-speaker and Other-speaker repetitions take place in line three and four. M then ticks off the correct picture and the activity continues.

An elaborated repetition from EL1/EL2 interactions is illustrated in 3.13, line three:

(3.13) [EL1/EL2, D22: 1-3]

1. J (EL1)	is the person holding the box/
2. H (EL2)	{ <i>eto</i> } (0.5) no
3. J →	like {with (0.5) that is} is the person holding the box with her hands $ $
4. H	no
5. J	no/
6. H	no

Furthermore, lines five and six consist of another example of an exact 'Same-speaker' and 'Other-speaker' repetition, although the prosody is not identical. Intonation features, as well as whether the repetitions take place in the indicator or response (the obligatory turns within a negotiated sequence) or in the reaction to the response or resolution (possible fourth or fifth turn in negotiation) are further discussed in the repetition chapter.

In contrast to Long's (1983a) study, which uses the terms 'other-' and 'self-' repetition, the present research employs the terms 'Same-speaker' and 'Other-speaker' repetition. Same-speaker repetition here does not refer to speech processing repetition ('restarts' or 'false starts') within the same turn, but to repetition by the same speaker in a subsequent

turn. In the native speaker interactions, speech processing repetition within sentences is considered to be only of limited relevance to the negotiation of understanding and is therefore not included or further analysed. Deen (1997: 39) also excludes self-initiated self-repair as well as forms of repetition in the same utterance in her research postulating that they do not lead to meaning negotiation between the respective speakers.

However, the present study found that in exchanges with nonnative speakers, the native speaker often uses partial repetition or paraphrasing after a short pause. This occurs when the speaker has realised that the interlocutor has not taken up his/her turn. In the present study, such repetitions (after a completed utterance) are labeled 'Self-repetition' (as illustrated in 3.14, line two and three):

(3.14) [EL1/EL2, D14: 97-102]

1. D (EL1)		and you can ask does it have a long bag holding (1)
2.	\rightarrow	$ $ {does it} (0.5) is it long where you can hold it $ $ (0.5)
3.	\rightarrow	is it long on the handle
4. Y (EL2)		it's long [hand
5. D		[yes it is [= overlapping
		it's got a long handle ((NNS ticks correct picture))

At the end of line one, D gives Y an opportunity to take his turn. However, Y remains silent and D continues by refining the original proposition and paraphrasing her utterance in lines two and three. In the native speaker data, this type of Self-repetition rarely occurred, but in the EL1/EL2 data it constitutes a recurring pattern and is therefore further discussed in Chapter Seven together with other features of repetition. There are also a variety of terms describing the initial turn which includes the word or utterance to be repeated such as 'repetend', 'model' or 'first saying' (Kim, 2002; Schegloff et al, 1977 Wong, 2000). This study uses the term 'initial utterance' for the original utterance. For example, in 3.14, line one would be the initial utterance.

3.10 Pauses within negotiation sequences

Pauses within negotiation sequences have received little attention but since they form a regular pattern and are often the trigger of negotiation, they constitute an interesting area of research. Pauses can be silent or voiced. The timing of a silent pause (in seconds) is included in brackets in the turn of the speaker who triggers the negotiation although pauses cannot be defined as belonging to a particular speaker. Pause length is

indicated in brackets; for example, micro-pauses (0.3 seconds and less) half seconds (0.5) and full seconds (1) etc. Pauses after initiating a turn-construction unit (TCU) can cause the other speaker to finish the turn such as shown in 3.15, lines one and two:

(3.15) [EL1/EL1, D1: 32-34]

1. K \rightarrow | is yours | (4)

2. D \rightarrow | linking arms/ |

3. K | yeah |

Not finishing a turn immediately prompted similar reactions in Japanese native speaker exchanges:

(3.16) [JL1/JL1, D9: 46-48]

M → 数字

 | suuji | (4)
 'the numbers' (4)

 Y → 変な数字。

 | henna suuji / |

'strange numbers'

3.M えっと、違います。

| etto (0.5) chigai masu | 'well (0.5) no'

The four second pause after M's unfinished TCU causes Y to continue by giving more specific information. Before negating Y's proposition in line three, M uses a voiced pause (*etto* meaning 'well') which is followed by a short silent pause (0.5 seconds).

Furthermore, a voiced pause before taking up one's turn can also trigger the other speaker to take over the turn:

(3.17) [EL1/EL1, D6: 16-23]

1. K	\rightarrow	a: (0.5)
2. E		okay what you have to say is like um are they pointing like
3.		is the guy pointing to the girl
4.		or is the girl pointing to the guy
5.		or something like that (fast speech)

6. K	okay okay
7.	is the boy pointing to the girl
8. E	yes

The hesitation sound 'a:' in line one causes E to suggest possible questions (in lines three and four). In line seven, K repeats the question suggested in line three, but replaces the word 'guy' with 'boy'. The utterance in line seven illustrates a 'paraphrase', a form of repetition not exemplified in section 3.9.

The combination of a voiced and silent pause as a trigger of negotiation is also found in the Japanese data:

(3.18) [JL1/JL1, D 7: 69-73] \rightarrow えっと 1. K |etto| (2) 'well' (2) 数えなくていいよ。 2. M | kazoenakute ii yo | (0.5) 'you don't need to count them' (0.5)3. 山になってるとかさ。 | <x> yama ni natteru toka sa | (<x> unclear speech) 'does it have the shape of a mountain or something like that' えっと、山になってるやつですか。 4. K etto yama ni natteru yatsu desu ka 'well is it the one which looks like a mountain' はい、そうです。 5. M hai sou desu 'yes that's correct'

During the pause after the discourse particle *etto* 'well' in line one, K probably started to count silently the number of cans on the picture he had in mind. Just as in the English excerpt (3.17), the other speaker takes over the turn by suggesting a possible question which is then picked up by the initial speaker.

Hesitation or lack of uptake has been identified as a trouble source in other research as well (see, for example, Bremer, 1996 or Levinson, 1983: 299). Deen's study (1997: 60) includes instances where the other speaker reacts with a clarification to 'nonverbal signals' in a 'trouble indicator' category. Shehadeh (2001) uses the term 'non-lexical means' and Nakahama et al (2001: 395) view silence (defined by them as a pause that lasts more than one second) as a pragmatic marker. Silent and voiced pauses often play a crucial role in interactions with nonnative speakers and co-occur in many instances immediately prior to the 'indicator' as well as in other turns of a negotiation sequence. Their role in negotiated interaction of native and nonnative speakers is further examined in Chapter Eight.

The above criteria and frameworks will be used as an analytical point of reference in the following chapters. The next chapter presents an initial analysis and comparison between data sets. It gives an overview of the amount of negotiation and its complexity permitting a better understanding of the role of negotiation in task-based interaction.

Chapter Four: Negotiation as a choice

4.0 Introduction

This chapter introduces the first research focus which is related to the amount of talk that negotiation takes up in L1 and L2 interaction. An overview of the data and information about the overall amount of talk in relation to negotiated sections per dyad will permit a clearer picture of the foundation of this study. Often research on negotiated interactions is based solely on statistical analyses which do not allow full insights into specific dyadic negotiation patterns. For example, in studies by Assis (1997), Williams et al (1997) or Yamaguchi et al (1999), it remains unclear if all or only some participants chose to negotiate. Research by Foster (1998) included participants who did not negotiate at all and many negotiation sequences could be traced back to a small number of speakers. As a result, she alerts us to the fact that overall percentages or statistical representations of the data do not always allow us to discern if the findings reflect a general pattern or are only applicable to some of the speakers.

In order to demonstrate that negotiation is not a rare phenomenon but is in fact used by all participants in their home language or second language, the following analyses show the amount of negotiation in relationship to the overall dyadic interaction in native speaker interaction, EL1/EL1 and JL1/JL1, and in EL1/EL2 dyads. Since negotiation takes place over turns, that is, in sequences, a distinction is made between simple or complex negotiation sequences and as previously indicated, 'analysis of speech units' (ASU) are used to clearly identify the overall amount of talk and negotiation. Foster et al's (2000) AS-units (defined in the methodology section 3.5) were found most suitable for the data transcription, as well as for their potential to compare dialogues across dyads and data sets.

The findings in this chapter are the results of the initial analyses which were essential before investigating specific linguistic features of negotiated interaction in the following chapters. They reveal the underlying framework of the present study and allow for valuable insights into patterns of occurrence and complexity of negotiation in child discourse. Although individual styles are not the focus of this research, it is felt to be important to include all available information and results, in order to clearly show that negotiation is not only used by a few but by all participants.

This chapter also gives an initial insight into the similarities and variations between data sets and a number of graphs and tables allow for comparisons between speakers and languages. Section 4.1 discusses the length and complexity of native speaker dialogues and 4.2 examines dialogues with learners of English, at the beginner level in 4.2.1 and intermediate/advanced level in 4.2.2. This is followed by a discussion in section 4.3 which investigates aspects of non-negotiation and negotiated interaction in the dialogues and if the participants always chose to negotiate.

As mentioned in the methodology section 3.3, forty-eight children in the same age group and school participated in this study; half are Australians and the other half Japanese nationals. Twelve Australian and twelve Japanese children formed six native speaker dyads each and the transcriptions of their interactions are labelled EL1/EL1 and JL1/JL1 data set. The other twelve Australian children spoke English (EL1) with twelve Japanese children learning English as a second/foreign language (EL2). Half of the learners were in the English beginner class and the other half learned English at the intermediate/advanced level. They formed EL1/EL2 six (beginner) dyads and six EL1/EL2 (intermediate/advanced) dyads. All forty-eight participants were in the same setting and age group (11/12yrs old), and used the same tasks. The researcher ensured that none of the children participated twice.

4.1 Native speaker dialogues

Sub-section 4.1.1 firstly examines the overall length of all dialogues in EL1/EL1 and JL1/JL1 interaction and compares it to the length of the negotiated segment. Next, 4.1.2 investigates the complexity of L1 negotiation by looking at simple and complex sequences. By presenting the raw data of each dyad in numbers of AS-units and percentages, this study takes a transparent approach to each analytical step hence allowing for an identification of the amount and complexity of L1 negotiation. All relevant data are described here at the level of the individual dyads before presenting the overall averages per native speaker data set. This is an essential step which allows for an insight into individual patterns and norms before the information is amalgamated into overall numbers and percentages in the following chapters.

4.1.1 Comparisons of overall interaction versus negotiated NS segments

Figure 4.1 shows the overall length of each EL1/EL1 dyadic interaction (in AS-units or 'ASU') in relationship to the negotiated part within the same dialogue. The data originates from the twelve native speakers of English forming six dyads (Dyad 1 to Dyad 6, or in short: D1-D6). These dialogues form the basis of the EL1/EL1 data set. The respective overall number of ASU per dyad is indicated at the bottom of each column after the dyad number.

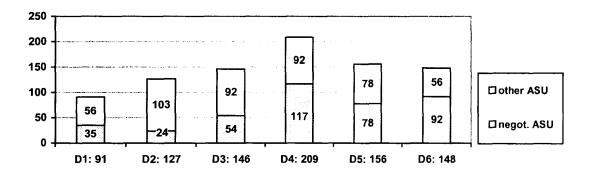


Figure 4.1. Negotiation and other AS-units in EL1/EL1 dyads (12 participants)

With the twelve native English speakers, the overall amount of talk needed to complete the given tasks varies between 91 and 209 AS-units per dyad. Within the overall amount of talk, the number of AS-units taken up by negotiation ranges between 24 and 117. For example, of the 91 AS-units produced by dyad one (D1), 35 AS-units form part of negotiation sequences. In the remaining 56 AS-units, the speakers understood each other without negotiating. Separate calculations revealed that the respective percentages of negotiated interaction within the overall dialogues range from 19% in D2, exactly 50% in D5 and up to 70% in the discourse of D4. The main purpose of the graph is to demonstrate that all dyads used negotiation as a tool in order to understand what their partner meant.

Figure 4.2 shows the dyadic interaction of the twelve native Japanese speakers (Dyads 7-12) in the same age group, doing the same tasks under the same conditions. Their dialogues are the focus of the Japanese native speaker interaction analysis (JL1/JL1 data set). Again, the top number in each column corresponds to the non-negotiated AS-units in their interaction, and the bottom number to the negotiated ones. The total number of ASunits is listed after the respective dyad number.

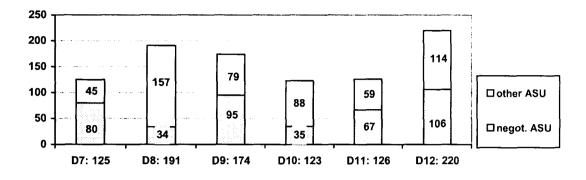


Figure 4.2. Negotiation and other AS-units in JL1/JL1 dyads (12 participants)

In Japanese native speaker dialogues, the length of the entire dialogue and its negotiated segment also varies. D8's negotiated part of the dialogue consisted only of 34 AS-units or 18% of the amount of overall talk; D11 and D9 used 53% and 55 % respectively, and D7 64% (or 80 out of 125 AS-units). D12 produced the overall longest dialogue in native speaker interaction (220 AS-units).

Adding up all AS-units of the entire dialogue and all negotiation sequences of Figure 4.1 and Figure 4.2 respectively, allows for a comparison of the overall dyadic interactions in English and Japanese, as well as their negotiated part (see Figure 4.3).

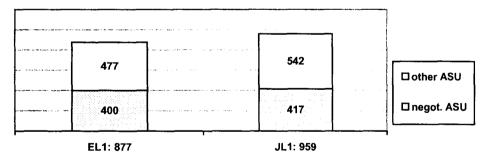


Figure 4.3. Overall length of respective dialogues and negotiation (in AS-units) 24 native speakers: 12 English speakers (EL1), 12 Japanese (JL1)

The amount of talk needed to complete all tasks was on average longer in the combined dyadic interaction between native speakers of Japanese: 959 AS-units as opposed to 877 with native English speakers. Comparing negotiation, the percentage within the EL1/EL1 dialogues is slightly higher: 45.6 % (400 AS-units out of 877) as compared to 43.5% (417 AS-units out of 959) in JL1/JL1 interaction.

These results show that negotiation is an integral part of native speaker task-based interaction and it is interesting to note that negotiation is used to a similar extent in both languages. An additional investigation of the dyadic interaction showed that within each dyad, all of the 24 native speaker participants started at least one negotiation sequence although in certain dialogues one of the speakers initiated negotiation more often than his/her counterpart. Chapter Five examines in more detail how and by whom negotiation sequences were begun. The following sub-section further clarifies what is meant by a negotiation sequence and examines the respective negotiated AS-units in regard to their complexity.

4.1.2 Complexity of NS sequences

As mentioned in the methodology section 3.6, the present study distinguishes between negotiation which leads to understanding within three to five turns (a simple sequence) and negotiation consisting of a longer cycle of turns (a complex sequence). A simple sequence consists of a trigger, an indicator and a response. A reaction to the response and a resolution are additional moves that are sometimes needed to finish off the sequence. The following excerpt further demonstrates what is meant by a 'simple sequence':

(4.1) [JL1/JL1, D9: 13-17] (2 girls)

1.Y じゃ、女の人が男の人と言い合いをしてるようですか。

	<i>ja onna no hito ga otoko no hito to iiai o shiteru yoo desu ka</i> 'well, does the woman appear to be disputing with the man?'	trigger
2. M	おんな、分からない。	
	onna (2) wakaranai 'the woman (2) I don't understand'	indicator
3. Y	女の人が左 側 にいて,	
	onna no hito ga hidari kawa ni ite 男の人は右側にいますか。	response
	otoko no hito wa migi gawa ni imasu ka 'Is the woman on the left side and the man on the right side?'	

reaction to response

4. M えっと、いいえ。 | *eto (1) iie* | 'well (1) no'

M indicates in line two that she does not understand what Y meant to say in line one and consequently initiates a negotiation sequence. Y responds in line three with a question focusing on a different aspect of the picture she has in mind and the negotiated interaction finishes with M's negation in line four. Their negotiated interaction consists of five AS-units since Y's response consists of two independent clauses in Japanese. In a complex sequence, the response or reaction to the response becomes the trigger of a new negotiation cycle. Since there can be a number of such cycles within a complex sequence, their length varies. In this chapter, examples of complex sequences are shown in excerpts 4.4 - 4.6 in sub-section 4.3.2 below.

Figure 4.1 indicated the overall length of EL1/EL1 negotiated interaction. Figure 4.4 below compares the complexity of the negotiation; that is the native English speakers' number of AS-units in simple or complex sequences. This allows for a more precise insight into the length of the respective negotiated sequences and indicates if the speakers are able to resolve the partial or non-understanding with their response, or if their response leads to further negotiation. By establishing the complexity of native speaker negotiation, it will then be possible to contrast the findings with the interaction taking place with nonnative speakers (see section 4.3).

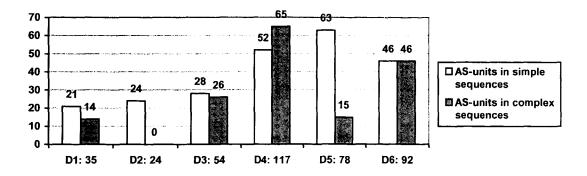


Figure 4.4. AS-units per dyad in simple and complex EL1/EL1 sequences

The figures on top of each column give the number of AS-units in the respective sequences per dyad. The total number of negotiated AS-units per dyad is given below the columns, for example D1: 35.

Figure 4.4 does not include the number of times that simple or complex sequences occurred within the overall amount of AS-units. In fact, D1's 21 AS-units are used in five simple sequences and 14 AS-units in two complex sequences. D2's overall negotiated interaction (24 AS-units) is composed of six simple sequences. This particular dyad did not utilise any complex sequences. D4 used the most complex sequences (five) in their negotiated interaction and this is reflected in their above average length of AS-units in complex sequences (65). However, since the focus of this study is on the overall dyadic interaction per data set, only the total number across all six EL1/EL1 dyads will be retained: 50 simple sequences consisting of a total of 234 AS-units and 15 complex sequences with 166 AS-units overall. Retaining the number of sequences per data set allows to establish and to compare the average length per negotiation sequence per data set. This will be further discussed in the final part of this section.

In regard to their task sheets, participants were required to tick the correct answer for each picture row. As explained in the methodology section, the task sheets were collected afterwards and this allowed the researcher to check if through negotiation they had successfully reached correct understanding or if the child had accepted ambiguous answers and chose the wrong picture. For example, D2's dialogue contained the least negotiation (24 AS-units), but it was noted that in two out of the fourteen rows (with four pictures respectively) they had ticked the wrong picture, indicating they did not always make sure that they had understood their interlocutor. They were not the only ones making mistakes – only three of the six dyads got all fourteen pictures right (D1, D3, D4). D5 got as many as five wrong, and D6 had one incorrect answer.

Next, simple and complex sequences in the data of the Japanese-speaking children are examined in Figure 4.5. As above, the amount of AS-units per sequence type is indicated on top of each column with the total of negotiated AS-units listed after each dyad number.

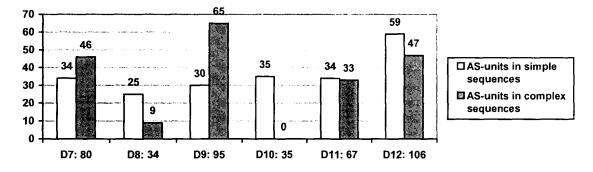


Figure 4.5. AS-units per dyad in simple and complex JL1/JL1 negotiation sequences

Again, this table does not indicate the number of simple and complex sequences of which the negotiation is composed and a separate count showed that the total number of simple sequences across all six JL1/JL1 dyads was 46 (consisting of 217 AS-units). Complex sequences (including 200 AS-units) were used eighteen times overall. It is interesting to note that the dyad with the least negotiation (D8) got four rows out of fourteen wrong. Non- or only partial understanding also led to two mistakes by D5 and one incorrect answer by D6. As in the EL1/EL1 dialogues, only three out of the six dyads were able to solve all tasks correctly.

This indicates that some of the native speakers did not always choose to negotiate to make sure that they got it right and that one of their options was to feign understanding. However, in contrast to the interactions with nonnative speakers, all English and Japanese native speaker dyads finished the tasks within the allocated time.

In order to allow for an overview of AS-units in simple and complex sequences, Figure 4.6 compares their overall length in negotiated native speaker interaction in English and in Japanese. The total of 400 EL1 AS-units and 417 JL1 AS-units at the bottom of the respective columns corresponds to the total of negotiated AS-units extracted from the overall data (as indicated in Figure 4.3).

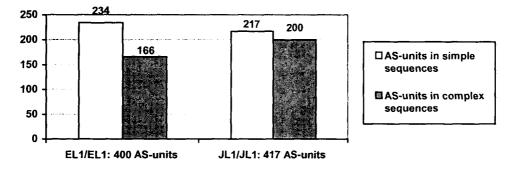


Figure 4.6. AS-units in simple and complex EL1 and JL1 negotiation sequences

Considering that the total number of simple sequences in negotiated interaction by all six EL1/EL1 dyads is 50 and the number of AS-units in simple sequences by the native speakers of English is 234, the average length of a simple sequence in AS-units is 4.7. Complex sequences, totaling 166 AS-units in EL1/EL1 negotiation, took place 15 times and their average length is therefore 11.1 AS-units.

JL1/JL1 simple negotiation sequences occurred 46 times and they contained 217 AS-units overall. The resulting average length of 4.7 corresponds exactly to the average length of simple sequences in EL1/EL1 interaction. Moreover, the combined number of complex sequences in JL1/JL1 data is 18 amounting to 200 AS-units with an average length of 11.1 per complex sequence by Japanese speakers, which is again the same average length as in the EL1/EL1 data.

These results demonstrate that in the participants' mother tongue the average length of simple and complex sequences is the same in both data sets. The findings also show that negotiation is a phenomenon in both languages and that on average, it takes the respective speakers the same amount of AS-units to finalise their sequences. The only difference is that the English speaking dyads produced slightly more simple negotiated sequences than their Japanese counterparts (50 as opposed to 46) and less complex sequences (15 versus 18).

These findings are remarkable considering that speakers of non-related languages and cultural backgrounds are involved. In other studies, such as Deen (1997), De la Fuente

(2002), Iwashita (2003) or Mackey (1999), an analysis of speaker interaction in their native languages is not included and native speaker norms remain unaccounted for. The present study allows for a comprehensive overview not only in regard to the amount of negotiation within the overall native speaker interaction, but also of its complexity. This background information permits a better understanding of what the respective speakers take for granted when they speak with or as learners.

4.2 Native and nonnative speaker dialogues

In order to allow for a comparison of the native and nonnative speaker data, the following sections investigate NS/NNS dyadic interaction. The data here originates from twelve children speaking English as their first language and twelve Japanese learners of English. They talked together in twelve dyads with each dyad consisting of one native speaker of English (EL1) and a Japanese child learning English as a second language (EL2). As mentioned earlier, the terms EL1 and NS, as well as EL2 and NNS, are interchangeable in this study. Since initial analyses showed that the amount of negotiation differs according to the learners' English level, sub-section 4.2.1 examines NS interaction with beginners and 4.2.2 with intermediate/advanced learners of English.

4.2.1 Dialogues between native speakers and beginner learners of English

The next two figures examine the dialogues of the six dyads (D13 - D18) comprising one native speaker of English (EL1) and a learner from the English beginners class. Figure 4.7 shows the amount of negotiation in relationship to the overall dialogue and Figure 4.8 gives the simplicity or complexity of the negotiation sequences.

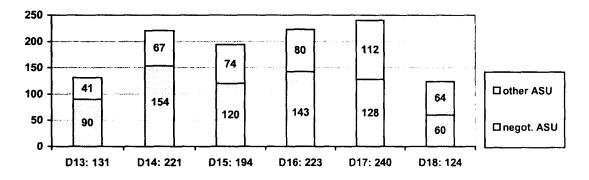


Figure 4.7. Negotiation and other AS-units in EL1/EL2 (beginner) dyads (12 participants)

Table 4.7 shows the overall length of the dialogue in AS-units (including all negotiation) beside each dyad number and (in the respective columns), the number of AS-units in negotiation and other sequences is given. For example, D13's overall length of the dialogue is 131 AS-units. Of these, 90 AS-units were dedicated to negotiation. Taken together, the six dyads produced 695 AS-units in negotiated sequences and the overall percentage of negotiation compared to the total dialogue (consisting of 1133 AS-units) is 61.3 %.

Figure 4.8 breaks down the total amount of negotiation in the six EL1/EL2 dyads (as indicated in Figure 4.7) into the number of AS-units in simple and complex sequences with the total of negotiated AS-units given after each dyad number at the bottom:

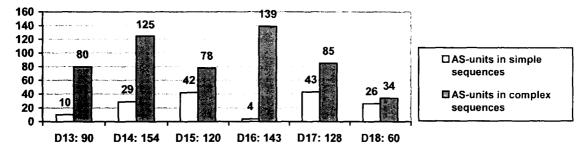


Figure 4.8. AS-units in simple and complex sequences in EL1/EL2 (beginner) dyads

In these EL1/EL2 (beginner) dyads, negotiation often takes place in complex sequences. A separate count of the number of respective sequences revealed that there are more complex sequences (37 in total) than simple sequences (33). This shows that in negotiated interaction with an EL2 (beginner), understanding is often not immediate, but takes place after additional clarification. Despite the higher amount of negotiation, the participants were not always able to solve their task correctly and half of the dyads made at least one mistake. Moreover, only D14, D17 and D18 were able to complete their tasks within the time given.

4.2.2 Dialogues between NS and intermediate/advanced learners of English

Figure 4.9 and 4.10 convey information regarding EL2 learners from the intermediate and advanced English class. School tests classified the NNS participants in D19 - D21 as 'intermediate' and D22 – D24 as 'advanced'. Since there were only three dyads at each level, a separate graph was not considered owing to the limited validity of further comparisons.

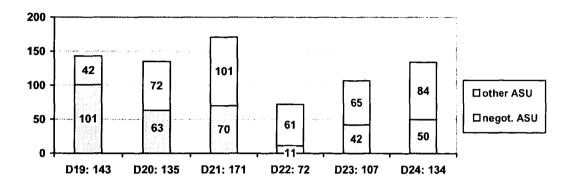


Figure 4.9. Negotiation and other AS-units in EL1/EL2 (intermed./adv.) dyads

As can be seen from the graph, D19, 20 and 21 (comprising intermediate English learners) negotiated more in EL1/EL2 dialogues than the advanced learners in D22, 23 and 24. Moreover, the amount of AS-units in the respective dyads reveals that the more they negotiate, the longer the overall dialogue.

Deen (1997) is one of the few researchers who also examines individual variations in regard to all dialogues forming part of her data. Deen's findings show that negotiation in NS/NNS interaction varies between 20% and 70% pending on the speakers, with the average percentage amounting to 50%. Individual percentages, as well as overall percentages of negotiation, are similar in this research. Slimani-Rolls' (2005) qualitative investigation of language produced in negotiation sequences also revealed that individual performances differ widely, a finding confirmed here as well.

The negotiated interaction in the six dyads with the more advanced learners also included a combination of simple and complex sequences and Figure 4.10 presents the respective findings:

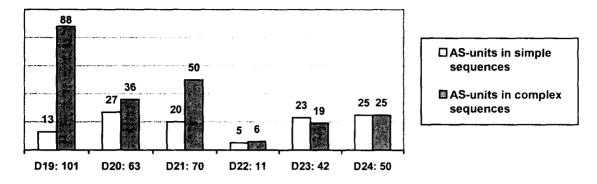


Figure 4.10. AS-units in simple and complex sequences in EL1/EL2 (int./adv.) dyads

The dyads with native speakers and intermediate/advanced English learners negotiated less than the EL1/EL2 (beginner) group. Overall, these six dyads needed only 25 simple and 23 complex sequences. It is especially interesting to see that the participants in the three dyads with the most advanced learners used negotiation only to a limited extent. The dyad with the least negotiation (D22) got one answer wrong, D20 made two mistakes. D19 got everything right but was not able to finalize all tasks. All others finished correctly within the given time.

In order to compare the performance of EL1/EL2 dyads with the native speaker data, the information from Figures 4.7, 4.8, 4.9 and 4.10 has been amalgamated into Figure 4.11 allowing for an overview of the AS-units in the overall dialogue, as well as in simple and complex sequences of negotiated interaction. A direct numerical comparison with the native speaker data cannot be made since the EL1/EL2 data set is composed of twice as many dyads as the respective native speaker data sets.

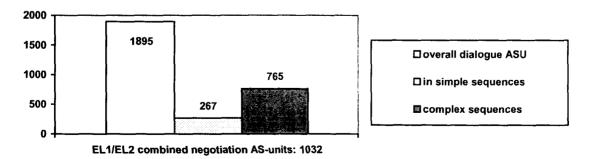


Figure 4.11. AS-units in the overall dialogues and in simple and complex sequences EL1/EL2 (beginner and intermediate/advanced combined)

The negotiated sequences of all EL1/EL2 dialogues combined consist of 1032 AS-units (or 54.5%) out of 1895 AS-units. The percentage of negotiation across all three data sets will be compared in Table 4.1 in sub-section 4.3.2.

The total amount of EL1/EL2 negotiation is composed of 58 simple sequences (within 267 AS-units) resulting in an average length of 4.6 AS-units per simple sequence. The remaining 765 AS-units consist of 60 complex sequences amounting to an average of 12.8 AS-units per complex sequence in the EL1/EL2 dialogues. Table 4.2 (in sub-section 4.3.3) indicates how these figures compare to native speaker sequences and examines variations. All findings are reviewed and elaborated in the following section.

4.3 Discussion of findings

The findings in this chapter situate negotiated interaction within the remainder of the respective dialogues, and the in-depth investigation into the number and length of negotiation sequences reveals similarities and variations between speakers and data sets. These results give an insight into individual percentages on which the values in the respective data sets are based and allow for an understanding of the wider picture before moving on to specific features in regard to negotiated interaction between and within dyads in the next chapters.

The following discussion firstly looks briefly at smooth interaction and focuses on segments of the overall dialogue which do not contain any negotiation (in sub-section 4.3.1). It then investigates dominant features of the negotiated part of the dialogue (4.3.2), looks at the overall complexity of negotiation sequences (4.3.3), examines if the participants always chose to negotiate (4.3.4) and concludes by investigating patterns in the initial findings (4.3.5).

4.3.1. When interactions proceed smoothly

Analyses of the overall dialogues show that in many instances the participants are able to convey their message clearly. Although the focus of this study is on the negotiated part of their interactions, this section looks at specific features of the 'non-negotiated' part of the dialogues, also called 'positive evidence' by Long and Robinson (1998: 19). It is important to examine the utterances in flawless talk in order to better understand short-comings in sentences triggering negotiation.

Bremer and Simonot (1996b: 181) examine in great depth features that make an utterance easier to comprehend, proposing that in conversation with nonnative speakers meaning has to be expressed as 'explicitly' as possible, and that meaning has to be readily 'accessible'. According to their study, explicitness can be achieved by, for example, using full forms instead of ellipsis, (modified) repetition or meta-discursive comments, and accessibility through, for example, short utterances, clear articulation and reasonable volume, pauses and high frequency vocabulary.

In this study, explicitness by the speaker is an important quality of all dialogues featuring limited negotiation. For example, no negotiation took place in the following exchange, owing to a detailed description of the picture V is inquiring about:

(4.2) [EL1/EL1, D3: 13-16] (2 girls)

1. V		is yours the one :: which is really short (1)
2.	\rightarrow	like {an} it's a triangle shape (.5)
3.	\rightarrow	and on top it's got a handle
4. J		no

V follows up her initial utterance in line one by elaborating on certain details of a picture with a handbag allowing J to clearly understand which one she means. Another feature in this dialogue is that the listener (J) does not take over the turn during the pauses at the end of each clause permitting V to continue with her sentence. Many of the non-negotiation focussed turns in the present study include instances where the interlocutor tolerated quite long periods of silence. On the other hand, pauses or hesitation by one of the speakers were also sometimes the trigger for or indicator of negotiation. Forms of silence and their effect on negotiation are further analysed and discussed in Chapter Eight.

Bremer and Simonot's (1996b) second criterion of accessibility is also identified as a prominent element in non-negotiated turns in the EL1/EL2 data set. For example, the

native speaker in D22 which produced the shortest dialogue and the least negotiation in the data, uses a slightly slower mode of delivery and pronounces clearly and audibly. The questions are quite precise and as illustrated in 4.3 (line one) they are sometimes articulated after reflecting briefly:

(4.3) [EL1/EL2, D22: 37-38]
1. J (EL1) → | {um} (1) is your person's hair up :: like in a pony tail or something |
2. H (EL2) | a=h no |

Before forming a question, J hesitates and pauses for one second. J's proposition includes enough detail for H to understand which picture she has in mind. Other reasons for their dialogue being the shortest were, for example, a limited use of turn-taking language or meta-comments.

Furthermore, although the children sat across from each other and had received instructions not to look at each other's sheets, it is possible that some of them were 'peeking' rather than negotiating when experiencing a problem. In other studies (such as Oliver, 1995b), boards were erected between dyads to avoid 'cheating'. Although this might increase validity, it was not considered by this researcher since it did not reflect the environment in which the children usually interacted.

Longer dialogues not including negotiation can be partially explained by the repeated use of meta-comments as well as some *aizuchi* 'feedback', especially with some of the Japanese native speakers. Language-switching, mumbling and self-talk was also observed. Additional turns were also caused by redundant questions and answers which included information already given rather than new information.

Sometimes, shorter dialogues can also be traced back to nonverbal interaction such as drawing, gestures, nodding or facial expressions and these phenomena are briefly discussed in the next chapter. In sum, features of talk without negotiation are a topic that deserves to be treated as a phenomenon in its own right. Interesting discussions of non-negotiated interaction as opposed to negotiation can be found in Ondarra (1997) and Iwashita (2003).

The main focus of the present study is however on negotiation, so the discussion from here onwards will be confined to the negotiated segments of the participants' discourse.

4.3.2 Dominant features of negotiated interaction

The aim of this section is to explain features of negotiation in native and nonnative speaker interaction. Since some of the dyads negotiated more than others, it is hence interesting to examine characteristics of longer negotiation sequences. This allows for an initial insight into interactions with speakers having difficulties in understanding or getting their meaning across.

Firstly, Table 4.1 compares the length in AS-units of the overall dialogue to the negotiated interaction in EL1/EL1 and JL1/JL1, as well as in EL1/EL2 dyads. Since there are twice as many dyads in the EL1/EL2 data set, only percentile or average comparisons of the negotiated part in the overall dialogue can be made.

	In EL1/EL1 data set	In JL1/JL1 data set	In EL1/EL2 data sets
	(6 dyads)	(6 dyads)	(12 dyads)
% of negotiation	45.6 %	43.5 %	54.5 %

Table 4.1. Percentage of negotiation across the data

This table shows the percentage of negotiation within the overall discourse in all three data sets (based on the information given in sections 4.1 and 4.2). It illustrates that the native speakers (EL1 and JL1), as well as EL2 used negotiation as a tool to reach understanding and that negotiation does not simply occur in interaction with language learners but also with speakers of the same language. A separate analysis of the data which trigger negotiation showed that each of the 48 participants in the 24 dyads initiated a negotiation sequence at least once. These findings establish that negotiation of understanding is not an isolated phenomenon, but is regularly used by all children participating in this study.

Overall percentages do not allow discrimination between dyads and since the findings also show that some dyads negotiated more than others, some of the features leading to additional negotiation are examined in this section. The excerpts are purposely taken from the interactions of the dyads with the most negotiation in the EL1/EL1, JL1/JL1 and EL1/EL2 data sets allowing for an initial insight into why and how children negotiate understanding.

In her research with Spanish (NS/NNS) speakers, Ondarra (1997: 437) points out that learners often negotiate because they have difficulties perceiving words and structures. At the discourse level of her data, negotiation was prompted by the lack of topic relevant information, density of information, implicitness or ellipsis. Some of these factors also apply to NS/NS interaction in the present study. The following EL1 excerpt shows, for example, how inclusion of topic relevant information results in understanding. T pays great attention to details and suggests S be more explicit (such as in line four and six):

(4.4) [EL1/EL1, D4: 58-68]

()[-		,]
1. S		the clock on the right has all the numbers/
2. T		eh/
3. S		does the clock on the right have all the numbers
		and it's four o'clock/
4. T	\rightarrow	{there are} there is a clock of roman numerals and Hindu Arabic numerals
		which one/
5. S		eh/
6. T	\rightarrow	you have to ask me Hindu Arabic numerals or {um} Roman numeral
7. S		Hindu Arabic
8. T		yes
		they are Hindu Arabic ones
9. S		o=kay

D4 negotiated most in the EL1 native speaker interactions (in 117 AS-units) and this brought the length of their overall dialogue to 209 AS-units. Their dialogue is marked by the dominance of one of the speakers (T) who initiates more than half of the negotiated sequences and consistently asks S to be more specific. In negotiated interaction with nonnative speakers, it will be of particular interest to examine how incomplete understanding is indicated and resolved and this issue will be addressed in Chapters Five and Six.

The longest negotiation and overall dialogue in the Japanese speaking dyads occurred between two boys (D12). Negotiation here takes place in the form of repetitions. The importance of repetition as a tool for clarification is the focus of Chapter Seven. This excerpt is another example of a complex sequence in that the response in line three becomes the trigger of further negotiation in reference to the initial utterance:

(4.5) [JL1/JL1, D12: 93-100)

1. TS	えっと、後ろがとがっていますか。	
	{etto}(1) ushiro ga togatte imasu ka/ 'well (1) is the back pointed?'	trigger
2. TA	後ろがとがってる	
	ushiro ga togatteru/ 'pointed in the back?'	indicator
3. TS	うん。	
4. TA	<i>un</i> 'yes' あの後ろのこと。	response/trigger
5. TS	<x> ano ushiro no koto 'you mean the back?' うん、そうです。</x>	indicator
6. TA	un so desu 'yes' (that's what I mean) とがっています。	response
0. 111	togatte imasu (clear voice) '(yes) it is pointed'	reaction to response
7. TS	はい。	
	hai @	
8.	ありがとうございました。	
	arigato gozaimashita 'yes' (laughter) 'thank you'	resolution

Instead of answering TS's question in line 1, TA chose to make sure that he got it right by firstly inquiring if TS means 'pointed in the back' (line two), then by asking again 'the back' in line four. After twice receiving confirmation, he answers TS's question in line six. In line seven, TS indicates that he understands, then laughs and thanks.

It is also important to note that laughter is often used to overcome awkward situations in conversations with Japanese and occurs a number of times in negotiation sequences when the dialogue does not proceed smoothly (such as in complex negotiation sequences), a topic further discussed in the next chapter. Thanking or explicit turn-taking language is another typical feature prolonging not only this particular dialogue, but also some of the other Japanese native speaker interaction.

The highest level of negotiation in the data (154 out of 221 AS-units) took place in EL1/EL2 D14 with a learner of English at the beginner level. Again, forms of repetition are a major component of their dialogue:

(4.6) [EL1/EL2 (beginner), D14: 28-40]

1. D (EL1)	{is your boat} (1) is your boat um completely flat/
2. Y (EL2)	(1)hu/
3. D	{does your boat} (1) is it so you can sail
4. Y	hu/
5. D	is it a proper boat/
6. Y	eh (0.5) a proper boat/ (hesitant)
7. D	okay
8.	\mid {is your one} um (0.5) does your one have something on the top/ \mid
9. Y	no
10. D	no/
11.	okay
12.	um does yours have something sticking out of the top/
13. Y	no

Since D (a girl) realises that Y (a boy) had very little vocabulary, she tries several strategies to assure understanding, for example, repetitions in the form of paraphrases. Instead of asking 'Does your boat have a mast (or sails)?' she appears to presume that Y

would not understand 'mast' or 'sails' and therefore asks: 'Does it have something sticking out of the top?' (line twelve). She also repeats Y's answer to make sure that she got it right. Y's answers only confirm or disconfirm D's propositions. When it is Y's turn to ask questions, D's help often provided the necessary support:

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(4.7) [EL1/EL2 (beginner), D14: 90-96]
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1.	Y (EL2)	that (1) bag is (2) etto ('well') <l1> (mumbles) (3)</l1>		
2.	D (EL1)	you can ask me like is it rectangular (1) is it rectangle		
3.	Y	eh/		
4.	D	is it rectangle		
5.	Y	is it rec (0.5) [rectangle [= overlapping		
6.	D	[rectangle]		
7.		yes it is		

Throughout their dialogue, D helps Y with his English by teaching him vocabulary and structures. She monitors his utterances closely and after Y's incomplete utterance followed by pauses and mumbling in line one, D takes over the turn by suggesting a question in line two. Since Y does not fully understand, he uses a clarification request in line three, which is followed by a partial repetition of D's previous final noun phrase. Y successfully uses the word 'rectangle' in line five. Excerpt 4.7 illustrates the essence of a collaborative dialogue and how understanding is negotiated through D's input and Y's preparedness to try out new vocabulary and structures in 'pushed output'. Although Y's English is limited, it is interesting to note that the dyad was able to finish all tasks. The Japanese boy got all of his answers right but the Australian girl made three mistakes since some of Y's propositions were not sufficiently explicit.

This section has been a general introduction to some of the factors leading to longer negotiation sequences. As stipulated by Ondarra (1997) and Bremer and Simonot (1996b), raising explicitness and accessibility is important. This might require the use of shorter utterances and recourse to high frequency vocabulary at times. In her major research with children in the same age group, Oliver (1995b) suggests that primary school aged children focus more on getting their own meaning across and are less interested in helping their interlocutor to understand. She attributes this fact to the egocentricity of children. Oliver's

study also employs Long's (1983a) typology of clarification requests, confirmation and comprehension checks and repetition. Oliver reaches this conclusion because her participants used few comprehension checks (such as repetition with rising intonation or questions such as 'Do you understand').

However, the present study has the opposite finding. The extracts above and other instances in the data of the present research suggest that understanding is promoted by means other than comprehension checks and that the EL1 often tries hard in order to facilitate the learner's effort to communicate in English. This point will be further elaborated in Chapter Seven on repetition, as well as in the final discussion in Chapter Nine.

This preliminary comparison of the data sets has illustrated why certain dialogues contained more negotiation and allowed for an insight into how negotiated sequences contrast in their focus and content. It shows that the children had various approaches to the given tasks and took hurdles in different ways. Specific patterns in negotiated interaction with native and nonnative speakers in the present study are explained in the following chapters.

4.3.3 Complexity in negotiation

Having established that negotiation occurs in native speaker interaction as well as in dialogues with learners of English, it is useful to compare and contrast the data sets in order to investigate if the negotiated interaction consists of simple or complex sequences (as discussed in 4.1.2-and illustrated in 4.4 - 4.6). When the trouble source is not solved in the response and negotiation continues, some studies considered this as a new simple sequence (for example, Iwashita, 2003; Oliver, 1995a; Yamaguchi et al, 1999). However, this does not allow for insights into the length of the respective sequences and whether understanding takes place within a few turns or whether negotiation stretches over a number of turns. Other studies (Williams et al, 1997; Shehadeh, 2001, Nakahama et al, 2001) differentiate between short and longer negotiation cycles although variations in length are not always clarified.

In the present study, Figures 4.4, 4.5, 4.8 and 4.10 displayed the length of individual simple and complex sequences per dyad in each of the data sets. Figures 4.6 and 4.11 allowed for an overview of the overall length of respective sequences in native communication and when talking with a learner of English. Table 4.2 summarises the number of sequences within AS-units of simple and complex sequences per data set, allowing for a comparison of the number of sequences in the respective data sets.

	EL1/EL1 data	JL1/JL1data	EL1/EL2beginner	EL1/EL2 int/adv.
Sequences:	Dyads: 6	Dyads: 6	Dyads: 6	Dyads: 6
simple sequences	50	46	33	25
complex sequences	15	18	37	23

Table 4.2. Simple and complex sequences across the data

As mentioned earlier, the average length of a simple negotiation sequence in the EL1/EL1 data set is 4.7 AS-units and 11.1 AS-units for a complex sequence. It is truly remarkable that the average length of simple and complex sequences in JL1/JL1 dyads is identical. A slight difference is that the English speaking dyads produce somewhat more simple negotiated sequences than their Japanese counterparts (50 as opposed to 46) and slightly fewer complex sequences (15 versus 18).

In EL1/EL2 (beginner) interaction, a greater number of complex sequences occurs (37 complex sequences versus 33 simple sequences). Owing to the constraints of a simple sequence which can only include a trigger, indicator and a response (or at the most a reaction to the response and a resolution), the average length of a simple sequence is about the same in EL1/EL2 dyads as in native speaker interaction: 4.6 AS-units. However, complex sequences with learners at the beginner level tend to be longer with their average length being 14.6 AS-units. In intermediate/advanced EL1/EL2 negotiated interaction, the average length in AS-units of a simple sequence is 4.5 AS-units, however, the average length of complex sequences was only 9.7 AS-units. This is due to the fact that some of the advanced learners in this group (in particular D22) needed very little negotiation to get their message across. As mentioned previously, D22's approach to the task was so efficient that their dialogue was the shortest in the entire data.

These results allow the proposition that when speaking with another native speaker, the EL1 and JL1 have similar expectations in regard to the amount and complexity of negotiation sequences. However, in EL1/EL2 negotiated interaction, especially with beginners, the findings show that negotiation takes up a larger part of the interaction and that complex sequences prevail. This implies that both speakers in EL1/EL2 dyads have to adjust to more and longer negotiation sequences. Moreover, if time is limited, they may not be able to complete the task since more negotiation is needed to reach understanding. Other studies also report that negotiation takes place more often in negotiated interaction with or as a learner (for example, Deen, 1997; Oliver, 1995a). In Deen's (1997) report, negotiated interaction decreased with improved English proficiency of the NNS, a pattern also observed in this study. In addition, Oliver's (1995a) paper indicates that children do not always choose to negotiate and this is also the case in the present study.

4.3.4 The choice to negotiate

As mentioned in the methodology section 3.2, one of the four characteristics of tasks which tend to produce negotiation is that they have only one acceptable outcome. Another point is that it is possible to check if the answers given by the participants are correct. Since the researcher collected all data sheets, it was possible to verify all responses. The researcher found that wrong answers were given in all three data sets. The native speakers of English and of Japanese made about the same amount of mistakes (eight and seven respectively). The six dyads including native speakers of English and L2 beginners gave five wrong replies and the fewest mistakes were made by the six EL1/EL2 (intermediate/advanced) dyads.

This indicates quite clearly that native as well as non-native speakers do not always view negotiation as a preferred option. This point is also made by Aston (1986) who explains that frequent negotiation might represent an interruption to the flow of conversation and could leave the learner with a feeling of frustration. A study by Foster (1998) also notices that problems in conversations are not always solved and that some of the participants feigned understanding. This is probably because they prioritised some other interactional goal.

In a separate research study by Ibaraki (1996), sixty Japanese junior high school students from the same institution were asked if they used 'verification strategies' when speaking English, such as making sure that they understand the other speaker's proposition or that their utterance is understood correctly. The majority of the 12-15yr old participants stated that they either use this strategy seldom or never which indicates that they might often pretend to understand. However, although understanding might have been feigned at times, the relatively high amount of negotiated sequences in the present study does indicate a desire to resolve incomplete understanding by L1 as well as L2 speakers.

4.3.5 Initial patterns

Although this is only a small sample population, certain patterns are suggested. Firstly, negotiated interaction takes place within all dialogues, and each of the 48 participants initiated a negotiation sequence at least once. The findings allow for an appreciation of individual differences and the role negotiation plays not only at the level of the data set, but in each dyadic interaction. This study hence takes a transparent approach in regard to all components of the data.

Secondly, in native speaker dialogues, negotiation of non- or partial understanding is predominantly clarified in simple sequences, whereas in interactions with a nonnative speaker, more complex sequences are used, and these negotiations frequently hinge on non-understanding of lexis and structures. The initial findings show that in dialogues with learners, the native speaker plays a crucial part in achieving mutual understanding.

Thirdly, the average length (in AS-units) of simple and complex sequences in the participants' negotiated interaction is generally the same in L1 interactions but differs in NS/NNS negotiation. Especially with beginners more negotiation takes place and complex sequences prevail. Some of the participants in EL1/EL2 dyads were not able to finish their tasks on time and this confirms that when speaking with a learner of English it might take longer to get a message across. The number of wrong responses given by the participants from a native and nonnative speaker background also indicates that negotiation does not always take place or lead to clarification.

These introductory findings also demonstrate the important fact that what is called 'negotiation of meaning' in much of the SLA literature, does not occur solely in language learning situations. In fact, speakers of the same language also negotiate, since partial- or non-understanding can take place at the content or communicative level.

There is evidence in all three data sets (including EL1/EL2 negotiation) as well as in the excerpts included in the study that negotiation is also a social activity. The way the participants negotiate is rather dynamic at times and reveals a spirit of co-operation that is difficult to represent in functional or formal categories. There is willingness by both speakers to resolve trouble sources and this is accomplished in a joint effort. The focus of the children is often on how to reach understanding and at times the learning taking place in the negotiation process could be viewed as a fortunate by-product. An emphasis on negotiation as social activity is naturally a socio-linguistic concern, and research on these aspects of language learning is included in the background of this research.

The main foci of the present investigation are centred on linguistic and pragmatic features of negotiation and the following analysis of L1 negotiation permits unique insights into habitual ways of dealing with non- or partial understanding hence allowing for a grounded discussion of subsequent analyses of EL1/EL2 negotiation. Intra- and inter-linguistic similarities and variations of negotiated interaction are further examined in each of the following chapters. The next two chapters will examine forms and functions of the components of negotiation, consisting of the trigger, indicator, response, reaction to response and resolution.