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REPAIR SEQUENCES IN AMERICAN LEARNERS OF GERMAN INTERLANGUAGE

BY

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Submitted to the graduate degree program in Germanic Languages and Literatures and the Graduate Faculty of the University of Kansas in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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ABSTRACT

This study in Conversation Analysis investigates the organization of other-initiated repair sequences in American learners of German, i.e., it examines how learners deal with troubles in hearing or understanding that they encounter in naturally-occurring talk-in-interaction.

Data for the project were collected during informal interaction in three groups of American learners of German, two groups enrolled in German courses at an American university and one group participating in a study abroad program in Germany. The data from the 3 groups was analyzed in terms of (1) the types of troubles these learners encounter, (2) which repair initiation techniques they employ, and (3) how troubles are resolved.

The results indicate that there is a systematic relationship between trouble sources, repair initiation strategies, and repair operation strategies that accounts for a large number of repair sequences in the data. Overall, the results indicate that these learners have access to a wide range of repair strategies; however, the organization of repair in these learners differs not only between groups, but also from that documented in native speakers in a number of ways.

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Introduction

The purpose of this study is to investigate repair sequences in American learners of German. By 'repair sequences' I mean the location, means, and outcome of attempts to deal with troubles in conversation, namely troubles with speaking, hearing, or understanding. Specifically, in this dissertation, I investigate the use of other-initiated repair sequences, i.e., those that deal with troubles with hearing or understanding talk-in-interaction.

While repair sequences in general and other-initiated repair sequences in particular are widely researched in native speakers of various languages, including English and German, and have also received considerable attention in classroom interaction among non-native speakers, not much is currently known about other-initiated repair sequences in American learners of German in naturally-occurring interaction. This dissertation seeks to contribute to this body of knowledge by investigating how these learners employ repair sequences in naturally-occurring interaction with their peers and how this compares to native speaker behavior in similar environments.

Other-initiated repair sequences were chosen for this study because of their significance for language learners in particular. Due to the learners' incomplete knowledge of the target language, they are likely to encounter troubles with understanding interaction in the target language. Therefore, in order to successfully participate in a conversation and avoid a communication breakdown, learners need to know how to deal with such problems in an ongoing conversation, i.e., they need to

know how to indicate that they are experiencing a problem and how to resolve such problems. It is the purpose of this study to investigate to what degree that is the case. Specifically, I will show what kinds of troubles these speakers encounter, how they attend to them (i.e., make other conversation participants aware of them or assist others in resolving their troubles), and what the outcomes of this attention are (i.e., whether and how troubles are successfully resolved).

In particular, I examine repair sequences in three groups of American learners of German at different levels of instruction in an American university's regular German language sequence: one group of learners enrolled in a second semester Beginning German II course, one group of learners enrolled in the subsequent third semester Intermediate German I course in the same language program, and one group of learners taking the same third semester *Intermediate German I* course, but in an intensive summer study abroad program. By investigating the occurrence of otherinitiated repair sequences in different groups of language learners, this study situates itself within the field of second language acquisition (SLA), providing new insights into how different learners are able to deal with troubles they encounter in a conversation. In chapter 1, I will thus begin with a brief discussion of the research questions to be discussed in this study and position it within the field of *interlanguage* pragmatics, i.e., the "appropriate way to use ... words and sentences [i.e., in this case, the repair mechanism] in the second language" (Gass & Selinker, 2001, p. 243), within the wider field of SLA.

In recent years, Conversation Analysis (CA) has increasingly been applied as a research methodology in SLA. Due to both (a) the fact that CA and its microgenetic emic approach to investigating language data allows for a detailed and interactionally situated understanding of talk-in-interaction, and (b) the fact that, as a result of this microgenetic approach, the concept of conversational repair as it is used in this dissertation was first developed within the field of CA and is thus intricately tied to this methodology, I have chosen CA as the methodological basis for this dissertation. Thus, in chapter 2, I will describe CA by defining its goals, explaining its fundamental concepts and terminology, and discussing its methods of data collection and data analysis, including the method of data collection used in this dissertation. Finally, I will define the concepts of repair in general and other-initiated repair in particular as they are understood within CA.

In chapter 3, I will describe the results of the study in terms of the types of troubles that these learners encounter, how they indicate that they are experiencing trouble, and how these two part of the repair mechanism are interrelated.

Specifically, I show that different types of troubles, of which I identify three main types, tend to be attended to by way of specific types of repair-initiating techniques, i.e., different ways of indicating these types of troubles. Apart from an apparent relationship between different types of troubles and different types of repair-initiation techniques, I also identify various interactional factors that can influence the appearance of specific repair-initiating techniques. Thus, while there is no linear relationship between a particular type of trouble and a particular type of repair

initiation, strong tendencies toward particular relationships can be identified and learners in all groups can be shown to orient to these relationships.

This is the topic of discussion in chapter 4. In this chapter, I show how learners repair other learners' troubles (i.e., how they attempt to resolve other learners' troubles) and I identify three main types of such repair attempts that are prevalent in the data. It is apparent in the data that learners orient to the repair-initiating techniques discussed in chapter 3 in the selection process for techniques to attempt a successful repair. When learners fail to orient to this mechanism, the trouble is frequently not resolved successfully, ultimately leading to longer and more complex repair sequences.

In chapter 5, I discuss the structure and origin of these longer and more complex repair sequences, specifically as it relates to the relationships between the different parts of repair sequences, i.e., the source of the trouble, the repair initiation, and the repair attempt. In addition to examining the interactional architecture of complex repair sequences, I also discuss other interactional reasons for which learners engage in conversational repair. Specifically, learners use conversational repair in order to affiliate with other speakers, thus creating alliances between various speakers. Thus, resolving troubles is not the only reason for learners to employ the resource of repair. This is similar to the behavior of native speakers of German, thus underscoring the importance for learners to be able to engage in conversational repair not only in order to prevent or repair communication breakdowns, but also to engage

in conversational practices common in native speaker interaction in the target language.

In chapter 6, I will conclude this dissertation by first summarizing the findings discussed in chapters 3, 4, and 5 and situating them within the theoretical framework outlined in chapters 1 and 2. In this part of chapter 6, I address the question of what insights this cross-sectional study can provide into second language acquisition as it relates to repair sequences and the role a study abroad program may play. I will then discuss the role of repair as a *means* for second language acquisition as opposed to the object of it. Specifically, other-initiated repair sequences as they feature in negotiation of meaning in non-native speaker interaction are believed to be able to drive interlanguage development forward. I discuss some instances where this may occur in the learner interaction in this study. Finally, I will conclude this dissertation by suggesting two pedagogical implications of the study results, i.e., how the results of this investigation may inform language classroom interaction.

1. Introduction

1.1. Research Questions

In this dissertation, I will investigate specific communication strategies, i.e., repair strategies, in American learners of German. By repair, I mean the location, means, and outcome of attempts to deal with troubles in conversation. While this also encompasses troubles with speaking (i.e., self-initiated repair), I have chosen to examine *other*-initiated repair sequences, i.e., instances of troubles with hearing or understanding which one or more interactants are experiencing with another interlocutor's speech. I chose this type of repair sequence not only because of its important role in the organization of everyday conversation, where it plays a vital role in both establishing and maintaining intersubjectivity, i.e., mutual understanding, as well as negotiating interpersonal and interactional issues among interactants (e.g., affiliation), but also because of the role it may play in Second Language Acquisition (SLA), where it is seen as having the potential to drive interlanguage development forward. Thus, the role of other-initiated repair as an important resource for learners is twofold: Not only can it potentially contribute to advancing learners' interlanguage development, but – most importantly – it is also a vital tool for establishing and maintaining intersubjectivity, thus enabling learners to successfully participate in a conversation and prevent communication breakdown if they encounter problems. Thus, learners need to know how to deal with such problems effectively, i.e., how to successfully engage in interactional (other-initiated) repair. It is the purpose of this

dissertation to investigate to what degree that is the case. Specifically, the following questions will be investigated:

1) How do American learners of German other-initiate repair?

In chapter 3, I will examine how the learners in this study other-initiate repair and in particular, which repair initiation strategies they use. These findings will be compared to a) previous findings in native speakers (NSs) of English and German and b) previous research results in nonnative speakers (NNSs) of German. Comparing the study results to findings in NSs of both English and German can provide insights into the role of L1 transfer in regard to repair strategies in these learners, i.e., whether and how they may seek to (successfully or unsuccessfully) transfer repair strategies from their native language English (i.e., their L1) into the target language (here, German). Furthermore, because data for this dissertation were collected in an environment approximating naturally-occurring interaction, i.e., the environment in which native speaker data tend to be gathered (as opposed to the dyadic native speaker/nonnative speaker or classroom interaction environments in which much nonnative speaker data on repair tend to be gathered), this comparison can also provide information about the degree to which different learners are able to approximate native speaker norms in the organization of repair in comparable environments.

Comparing the results of the study to previous research results in nonnative speakers of German, data for which primarily come from unequal power speech exchange systems such as the aforementioned classroom or an oral interview setting,

will furthermore allow for both an identification of the influence of the data collection environment on learner behavior, thus contributing to a better understanding of the overall organization of repair in learners, and a discussion of the role different levels of language ability may play in the organization of repair, given that both previous research in this field as well as the present dissertation involve learners from different levels of language instruction.

In fact, it was found that different groups of learners in the data appear to favor different types of repair initiations. This finding supports previous research on nonnative speakers of German and suggests a link between length of language study (which, in this dissertation, but also in some previous research, is primarily measured by institutional seat time) or intensity of language exposure (in the case of the study abroad group) and the organization of repair, showing that learners who have studied German for a longer period of time and/or have participated in a study abroad program (thus increasing the intensity of exposure to the language) tend to use more native-like repair initiations.

2) Which kinds of trouble sources do learners encounter or: What are the purposes of their repair initiations?

Also in chapter 3, I will examine the types of troubles that the learners in the data attend to. Unlike repair initiations, for which a number of well-established strategies exist in the literature, there are no well-established categories of types of trouble sources in the literature. However, three main types of troubles were

identified in the data. The occurrences of these three types of trouble sources in the different groups were then related to results by other researchers who have examined the question of what types of troubles nonnative speakers (primarily of English) encounter or are concerned with (e.g., Shonerd, 1994). This previous research has suggested that learners at different levels of language ability are concerned with different types of troubles. A comparison of the troubles encountered by the learners in the different groups in this study with those established by other researchers for different levels of language proficiency suggests that learners in the different groups discussed in this dissertation may be operating a different levels of language ability. In light of the data presented in this study as well as previous research on both native as well as nonnative speakers primarily of English (e.g., Shonerd, 1994), it was found that there likely is a connection between language ability and the types of trouble sources attended to in repair sequences.

3) How do the troubles get resolved?

In chapter 4, I will examine the strategies learners use to respond to repair initiations, i.e., which forms of repair operations appear in the data. While much research has focused on how learners initiate repair, there is little research on how or why either learners or native speakers perform a particular repair operation. By identifying three different types of repair operation strategies that are common in these learners, this dissertation thus provides an initial, although likely basic and expandable, classification system of repair operation techniques as they are

observable in the data. While a comparison with previous research was not possible, it was nevertheless possible to identify similarities in the structure of preferred repair initiation and repair operation techniques, respectively, in different groups of learners. I will argue that these structural similarities suggest that differences observed in preferred repair operation techniques in the various groups in this study may be related to the different lengths of time the groups have studied German and/or the different intensities with which they were exposed to German language input.

4) How are the above questions interrelated (i.e., how do repair initiations, trouble sources, and repair operations relate to one another)?

There are few systematic accounts that the author is aware of that describe any kind of systematic relationship between trouble sources, repair initiations, and repair operations in the organization of repair, either in native or nonnative speaker conversation. In contrast, such relationships have often been denied (Svennevig, 2008, p. 347). However, in the data, a relationship was clearly observable. Specifically, specific types of repair initiations may communicate information about the type of trouble source involved in a given repair sequence to the speaker of the trouble source. In response, the trouble source speaker selects a repair operation strategy suitable for resolving this particular type of trouble. Speakers in all groups were found to orient to this relationship, although with varying consistency. While no such system has previously been described, it may in fact explain one mechanism that enables learners to efficiently negotiate the repair process despite their relatively

low level of language ability in the target language (with institutional seat time ranging from two semesters or two semesters plus one summer to three semesters).

5) Do the answers to these questions differ in the different groups and how so? Specifically, what is the role of a study abroad program in the organization of repair in these learners?

While it is the primary purpose of this dissertation to describe the organization of repair in these learners (i.e., to show what learners do when they engage in conversational repair; a task undertaken in answering research questions 1 through 4 as outlined above), notable differences in the use of various aspects of the repair mechanism (e.g., types of trouble sources, repair initiation and repair operation techniques, respectively, and other interactional factors [discussed in chapter 5]) were observed among the different groups. Research question 5 is designed to address these observations.

Comparing the findings in the different groups of this study (particularly in respect to repair initiations and trouble sources; due to a lack of previous studies investigating repair operation techniques, a comparison was not possible in this respect) to previous findings by other researchers on various groups of learners with differing language abilities suggests that the differences among groups in this study may be related to different levels of language ability in those groups. Particularly, speakers in both university-based groups (Group 1 and 2) were found to engage in repair mechanisms in a similar manner as other groups described as being beginning

learners in various previous studies, while speakers in the study abroad group (Group 3) were found to be more similar to speakers in other studies described as being more advanced speakers. In addition, by comparing speakers in the various groups to native speakers of German, it was found that the learners in the study abroad group were more native-like in various respects in their use of the repair mechanism.

While cross-sectional studies such as the one undertaken for this dissertation are limited by their design in that they do not allow for the construction of causal relationships or for an explanation of the development of pragmatic features over time, they can contribute to our understanding of pragmatic development in learners by "permit[ting an] analysis of overall, net change at the macro level through aggregated data" (Kasper & Rose, 2002, p. 78). That is, the results of this study can neither be evidence of pragmatic development in these learners, nor of a causal relationship between institutional seat time or the study abroad experience and observed differences in the organization of repair in these learners. However, it may nevertheless be possible to infer conclusions about interlanguage development on the macro level based on this cross-sectional study. As both cross-sectional as well as longitudinal developmental studies are rare in interlanguage pragmatics in general and in studies investigating the influence of a study abroad program on interlanguage development in particular, I will address this question in some more detail in chapter 6. Specifically, in research on the linguistic benefits of study abroad programs, it is not yet clear which qualitative differences exist between students who study abroad and those who do not (Freed, 1993, p. 155) or whether students studying abroad

become more target-like in their language use (Barron, 2003, pp. 2-3). By investigating the organization of other-initiated repair and providing preliminary answers to these questions, this dissertation may contribute to the field of research investigating the possible pragmatic effects of study abroad programs.

1.2. Study Abroad

Given that the number of students studying abroad increases each year (according to the 2008 Open Doors report, there was a 150% increase in the number of students studying abroad over the last 10 years) and that there are efforts on the national level to increase this number (such as the Senator Paul Simon Study Abroad Foundation Act), it would appear to be of primary importance not only to the students considering such programs, but also to administrators, to know how study abroad affects second language acquisition. However, as recent as in 1993, Freed, in a survey of study abroad research to date, found that "no study has yet described, with any great precision, a range of linguistic variables (phonologic, syntactic and/or semantic), sociolinguistic and discourse features, that may be influenced as a result of a study abroad experience" (p. 158). A decade later, in 2003, Barron notes that "the question, as to what extent students' pragmatic competence develops over a period in the target country, i.e., to what extent they become "more L2-like" in their use of the target language, remains as yet largely unanswered" (pp. 2-3). While there have been notable contributions to this field since Freed's survey in 1993 (e.g., Barron, 2003; Kinginger, 2008, 2009; Pellegrino Aveni, 2005), it is still a field where much research remains to be done. Particularly studies "which examine qualitative differences in the language of students who study abroad as opposed to those whose learning is limited to the foreign language classroom represent an important step in the direction of a more complete understanding of the impact of study abroad experiences on students' language learning" (Freed, 1993, p. 155). It is with this in mind that this dissertation hopes to make a contribution to this field by including in its analysis (see chapter 6) a discussion of the possible influences of a study abroad experience on the use of repair strategies in those students that studied abroad (i.e., Group 3) vis-à-vis the ones who did not (i.e., Groups 1 and 2).

There is, in fact, evidence that a study abroad experience does influence learners' pragmatic competence in general and repair strategies in particular. In a recent study investigating *self*-initiated repair strategies, Smartt & Scudder (2004) found that the study abroad program did, in fact, have a significant effect on the repair behavior of students in a summer study abroad program in Mexico as compared to those students who took an identical class at a university in the US. Specifically, they found that, contrary to expectations, the study abroad students engaged in more word form searches than the at-home students. While this was attributed to either an increased language confidence – evident in the fact that the students were (more) willing to search for the appropriate word(s) – or an increased language competence or proficiency (p. 596), the study clearly showed an increase in such repair strategies in students participating in the study abroad program. In contrast, code switches, i.e., where students switch to their native language, declined

in the study abroad group. This led Smartt and Scudder to conclude that the study abroad students' dependence on the L1 decreased during the program (p. 596). Thus, they argue that if decreased reliance on the L1 is one of the goals of language instruction, their study suggests that in an L2-rich environment, such as a study abroad experience, this decreased dependence will evolve naturally, if given the chance (p. 597). Clearly, this has implications for the language classroom, suggesting that instruction involving large amounts of L2 input may be able to duplicate such an L2-rich environment to a degree and allow students to reap similar benefits to those experienced in a study abroad program.

While Smartt & Scudder's study shows that study abroad can influence the repair behavior of language learners and there are a number of other studies that show beneficial effects of studying abroad, research on what these benefits are and for which conditions they hold can be said to be to a large degree inconclusive. At least in part, this may be due to the instrument used in many of these studies. Specifically, many studies use oral proficiency interviews (OPIs) to collect and analyze data. The OPI, however, evaluates students' proficiency in a way that assigns one holistic score without discriminating on a detailed level, i.e., it is not very sensitive (Freed, 1990, p. 475). While this certainly does not render the OPI meaningless, it suggests that the OPI may not be suitable to analyze language development on a microgenetic level. This 'insensitivity' of the OPI may well contribute to the conflicting results gained by studies using the OPI as a measurement instrument. For example, while Brecht and Davidson found that "study abroad is an effective mode for learning to speak" (1991,

p. 16, as cited in Freed, 1993, p. 158), a study on beginning students in Japan (Huebner, 1991, 1995, as cited in Freed, 1993, p. 157) found no statistically significant difference in OPI scores (among other measurement instruments) before and after the program; similarly, Freed (1990) also found that the pre-and post-(study abroad) OPI test scores in her study on learners of French differed very little (p. 469). However, as opposed to the students in Japan, the beginning level students in Freed's study did make significant gains, while more advanced students did not. In contrast, Brecht & Robinson's results (1993) suggest that "the more language competency one has before immersion, the more one gains in-country" (p. 10). These results all appear to suggest that the level of language proficiency at the onset of the study abroad program may influence whether, and if so, to what degree, students make linguistic gains during a study abroad program; however, the results are inconclusive as to what this influence may be and to which students it applies.

It is important to note, however, that although some of these studies showed no significant statistical differences in the pre- and post-test OPI scores, differences were nevertheless noted by several of the researchers. This was the case, for example, in the study of students studying in Japan (Huebner, 1991, 1995), where the lack of significant differences was attributed primarily to the small number of students participating in the program (as cited in Freed, 1993, p. 157), in which case traditional statistical tests rarely show statistically significant differences. The fact that differences were nevertheless noted illustrates the importance of a detailed qualitative analysis: Observed differences may be relevant, even though they cannot

be shown to be statistically significant (see section 2.2.3 for a discussion of the CA position on significance).

1.3. Repair in SLA

1.3.1. Interlanguage Pragmatics

As the subjects in this study are engaged in the process of learning German, this project falls into the realm of SLA. SLA can broadly be conceived of as the study of how human beings learn a language other than their first language. While much of SLA research focuses on the acquisition of linguistic aspects such as phonology, morphology, syntax, or semantics, more recently, much attention has also been paid to the field of pragmatics. Pragmatics is broadly defined as "the study of the relations between language and context that are basic to an account of language understanding" (Levinson, 1983, p. 21) or, more specifically, "the study of language from the point of view of the users – especially of the choices they make, the constraints they encounter in using language in social interaction, and the effects their use of language has on the other participants in an act of communication" (Crystal, 2001, p. 269).

This dissertation deals with pragmatics and specifically repair sequences in the context of language learning; specifically, it looks at how language learners indicate and resolve troubles in conversation. What this dissertation is concerned with, then, is *interlanguage pragmatics* or the "appropriate way to use ... words and sentences [i.e., the repair mechanism] in the second language" (Gass & Selinker,

2001, p. 243). The concept of *interlanguage* is a fundamental concept in SLA and refers to "a continuum between the L1 [native language] and L2 [second language] along which all learners traverse" (Larsen-Freeman & Long, 1991, p. 60, as cited in Barron, 2003, p. 35), and which will always exhibit features of both the L1 and the L2, as well as autonomous features. That is, repair sequences in language learners may contain repair strategies both from the L1 as well as the L2, but also features that may not be found in either language. It is the primary purpose of this study to describe the learners' interlanguage in respect to repair strategies, i.e., the repair strategies they use and what the functions and outcomes of these repair strategies are, and explore the features in their interlanguage repair that may be attributable to the L1 or the L2 (which includes the possibility of more general, universal structures in the organization of repair) or, alternatively, may constitute independent mechanisms specific to the interlanguage. Overall, then, this dissertation seeks to establish the learners' level of pragmatic competence, i.e., their "knowledge of communicative action and how to carry it out' ... and ... the 'ability to use language appropriately according to context" (Kasper, 1997, as cited in Belz & Vyatkina, 2005, p. 21).

1.3.2. Research on Interlanguage Pragmatics

Interlanguage pragmatics research has focused on many different aspects of interlanguage pragmatics, including the use and development of pragmatics in L2 learners, their pragmatic awareness (e.g., Bardovi-Harlig & Griffin, 2005; Schauer, 2006), the role of language transfer, the interrelationship between pragmatic and

grammatical proficiency, how to test pragmatic ability (e.g., Walters, 2007), as well as, more recently, the teaching and teachability of pragmatics (e.g., Belz & Vyatkina, 2005, 2008; Huth, 2006; Huth & Taleghani-Nikazm, 2006).

Traditionally, much research on interlanguage pragmatics has focused on the first of these aspects, i.e., the description and explanation of how L2 learners use pragmatic features in the L2, e.g., the realization of particular speech acts, such as apologies, offers, or invitations in L2 learners. Such research has consistently shown that "learners have access to the same range of speech act realization strategies ... as native speakers, irrespective of proficiency level" (Kasper & Rose, 1999, p. 86), but differ both qualitatively and quantitatively in the forms they use to implement these strategies at different proficiency levels (p. 88). In contrast, much less research has focused on the developmental aspects of interlanguage pragmatics, i.e., how pragmatics is acquired (e.g., Barron, 2003). However, in recent years, this area of research has also received increased attention.

This dissertation in particular will make a contribution to two subfields of interlanguage pragmatics research: (1) the use of repair strategies by learners and (2) the development of pragmatic ability as informed by a cross-sectional study design (see page 7). Traditionally, research on the realization of particular speech acts (such as a repair sequence) has employed elicited data, such as role plays or discourse completion tasks (Boxer, 2002). While research questions 1-4 of this dissertation address this area of interlanguage pragmatics research, i.e., they investigate the forms of repair strategies and their use in American learners of German, the data in this

study differ significantly from much previous cross-sectional interlanguage pragmatics research in that it employs naturally-occurring language data and explores a speech act not previously comprehensively addressed, i.e., the realization of repair strategies.

In contrast to questions 1-4, research question 5 focuses on a field in interlanguage pragmatics that has been less explored but has gained much interest in the last decade, i.e., developmental aspects of interlanguage pragmatics. While the cross-sectional set-up of this study limits the developmental inferences that can be made based on the data presented here, cross-sectional studies can nevertheless provide important insights into pragmatic development (e.g., Bardovi-Harlig, 1999, p. 682), albeit primarily on the aggregate macro level (Kasper & Rose, 2002, p. 78). Specifically, cross-sectional studies can describe how learners at different levels of proficiency use their pragmatic resources and can thus "establish... development by comparing these successive states in different people" (Cook, 1993, as cited in Kasper & Rose, 2002, p. 78).

Specifically, there are three different groups of learners (to be described in more detail in chapter 2) from three different levels of proficiency. Proficiency in this dissertation is primarily measured by institutional seat time (i.e., one group has spent two semesters learning German at a university, one group has spent three semesters, and one group has spent two semesters plus has completed an intensive study abroad program during the subsequent summer). Given that institutional seat time is also the measurement used to determine eligibility in the study abroad

program and is furthermore the measurement used to advance students in the foreign language program of this university, this was deemed a meaningful measurement of language ability.

In contrast, a number of cross-sectional and longitudinal studies on pragmatic (and other linguistic) development employ OPIs (Oral Proficiency Interviews) to determine learners' overall performance on a pre-specified scale, such as the ACTFL Proficiency Guidelines (Kasper & Ross, 2007, p. 2046).² However, this approach presents several issues. Specifically, as previously mentioned, the OPI evaluates students' proficiency in a way that assigns one holistic score without discriminating on a detailed level, i.e., it is not very sensitive (Freed, 1990, p. 475). That is, it does not allow for a detailed description of what learners are able to do at a given point in their language learning experience and learners who differ significantly, for example, in their use of the repair mechanism may receive a similar score due to other linguistic elements featured in the OPI. Reversely, it may be possible for two learners to receive very different scores in their OPIs, although their use of the repair mechanism may not differ much. Thus, OPIs may not necessarily yield reliable data.

Furthermore, not only have studies using OPIs as a measurement instrument for the development of linguistic ability in the past yielded conflicting results in learners on study abroad programs (e.g., Freed, 1990, 1993), but "several studies ... [which] have compared OPI discourse with ordinary conversation ... [have also] identified considerable differences in their sequential structure, preference organization, repair, topic organization, and question modification" (Kasper & Ross,

2007, p. 2047). While these issues do not render the OPI meaningless, it was nevertheless decided to take a different approach and use institutional seat time to discuss linguistic ability (i.e., proficiency) levels in this dissertation.

An additional problem that an examination of repair sequences presents in this respect is the fact that a comprehensive description of how learners use the repair mechanism (i.e., what they are able to do) either in general or at different stages of the acquisition process is not yet available, a point this dissertation in fact attempts to address. To this end, this dissertation uses comparisons with previous research discussing repair sequences of learners at a particular level of proficiency to establish an initial proficiency level for the learners in this study. Particularly, speakers in both university-based groups were found to engage in repair mechanisms similarly to speakers described as being beginning learners in previous studies, while speakers in the study abroad group were found to be more similar to speakers in other studies described as being more advanced speakers. In addition, by comparing speakers in the various groups to native speakers of German, it was furthermore found that speakers in the study abroad group were more native-like in various respects in their use of the repair mechanism. Thus, while initial proficiency in this dissertation is established by institutional seat time, additional information is provided by comparison of the learners with speakers in previous studies on repair in learners of German as well as German native speakers. This additional information in fact supports the use of institutional seat time as a measurement for proficiency, as the results of this dissertation bear out many previous findings.

1.3.3. Negotiation of Meaning

While this dissertation primarily studies the use of other-initiated repair in the learners' interlanguage per se, I have chosen to study other-initiated repair in particular in part because of its important role in language acquisition as a *means* to acquire language. Specifically, one approach in SLA to study repair or repair-like sequences is to look at spoken interaction as the place where negotiation of meaning takes place (e.g., Gass, Mackey & Pica, 1998; Krashen, 1982; Long, 1983; Long & Porter, 1985; Pica, 1994). Negotiation of meaning occurs when speakers encounter a problem with understanding each other in a conversation and temporarily halt the flow of that conversation in order to reestablish mutual understanding. In other words, it "provides the means for participants to respond appropriately to one another's utterance and to regain their places in a conversation after one or both have "slipped" (Gass & Selinker, 2001, p. 272). Such negotiation of meaning can include, for example, asking for repetition or comprehension checks. In SLA, the theory is that negotiation of meaning among speakers produces comprehensible input (Krashen, 1985) through modification of input. This comprehensible input can then become intake (e.g., Varonis & Gass, 1985). With input referring to what is available to learners and *intake* referring to what is actually taken in (Corder, 1967, as cited in Gass & Selinker, 2001, p. 260), i.e., incorporated into the learner's mental language structure, this means that negotiation of meaning is seen as a vital mechanism for increasing opportunities for language learning.³ There is, in fact, a large body of evidence supporting the role of negotiation of meaning in SLA (e.g., Long, 1985;

Long & Porter, 1985; Porter, 1986), not only because of its impact on input, but also on learner output (Pica, 1988; Pica, Holliday, Lewis & Morgenthaler, 1989; Swain, 1985; Swain & Lapkin, 1995). I will discuss the role of negotiation of meaning as it applies to my data in more detail in chapter 6.

1.4. Conclusion

In this chapter, I have outlined the research questions this dissertation seeks to investigate and situated it within the field of interlanguage pragmatics. Specifically, I will examine the structure and use of other-initiated repair sequences, i.e., repair sequences that deal with troubles in hearing or understanding.

Apart from enabling interactants in general and language learners in particular to work through troubles in hearing or understanding, however, within the context of SLA, other-initiated repair also serves a more specific purpose for language learners: Other-initiated repair is also seen as helping to drive interlanguage development forward, thus allowing learners to progress along the interlanguage continuum through engaging in repair. The benefits of knowing how to initiate and engage in repair, then, are twofold for language learners: They will be able to successfully maintain and establish intersubjectivity and simultaneously have the opportunity to acquire more language in the process.

Thus, in the following chapters, this dissertation will examine (1) to what degree different groups of learners are able to successfully negotiate troubles in talk-in-interaction, what types of troubles they engage in resolving, and how they resolve

this trouble, as well as (2) what the role of a study abroad experience may be in the organization of repair. These findings will contribute both to the body of research in interlanguage pragmatics in general, but also interlanguage pragmatics in study abroad contexts in particular.

2. Methodology

2.1. Conversation Analysis

2.1.1. Definition

Conversation Analysis (CA) is an empirical, data-driven research method that is used to study the talk that is involved when people interact, i.e., talk-in-interaction. In CA, this talk is conceived of as a social action, i.e., it is used to perform social activities; CA, then, is interested in how these actions are performed and understood:

The way in which utterances [in talk-in-interaction] are designed is informed by organized procedures, methods and resources which are tied to the contexts in which they are produced, and which are available to participants by virtue of their membership in a natural language community.

(Hutchby & Wooffitt, 1998, p. 1)

It is these organized procedures, methods, and resources that CA seeks to describe and explicate in order to uncover the systematic mechanisms organizing and enabling meaningful social interaction, i.e., the rules that interactants orient to in order to make their social actions understandable to their co-participants within the context of the ongoing talk-in-interaction. In this manner, it explores how intersubjectivity, i.e., mutual understanding, is established and maintained among interactants.

Talk-in-interaction as it mediates social action is, of course, not only of interest to applied linguists. In fact, CA was originally developed in the late 1960s by Harvey Sacks and his colleagues Emanuel Schegloff and Gail Jefferson within the field of sociology and is today applied to many other fields of study, such as

anthropology or psychology. However, a primary difference between CA and other research methods common in the social sciences, which often make use of observation, experiments, or elicitation techniques (e.g., discourse completion tests or interviews), is that CA uses naturally-occurring language that is recorded, transcribed in detail, and subsequently analyzed to describe and explicate social interaction.

Consequently, it limits itself to dealing with factors that are observable in this type of data; i.e., it deals with what speakers orient to and thereby make observable in their talk. It neither attempts to interpret or construe the motivations of the interactants (in contrast to, for example, discourse analysis), and does it consider such observable elements as race or gender relevant (in contrast to, for example, many studies in sociology or ethnography), unless, of course, interactants themselves specifically orient to these factors.

CA's focus on observable aspects of a conversation also means that talk is never seen as independent; rather, it is always addressed to a specific person in a specific context to accomplish a specific action. This is known as *recipient design* in CA and has important consequences for the generalizability of findings: Certain words may be used to accomplish certain actions in a particular situation, but may 'mean' something different or serve a different purpose in a different situation. For this reason, CA differentiates between *context-free* and *context-sensitive* aspects of interactional mechanisms. That is, the structure of a particular action (such as a repair sequence) may be universal, i.e., the same resources are used independent of context and are therefore considered context-free, while their applications are context-

sensitive, i.e., they make use of variations in this structure in order to adjust to cultural, linguistic, and situational specificities (Egbert, 2002, p. 1). Thus, while CA seeks to uncover the general mechanisms underlying and organizing talk-in-interaction, it also aims to describe the specific resources speakers use to make the general mechanisms applicable across settings and contexts. The organization of repair can illustrate this well: While CA has described the general mechanism of repair in detail, it has also uncovered variations that apply to this mechanism in certain contexts, for example, in an institutional classroom environment (e.g., Seedhouse, 2004).

2.1.2. Turn-taking

The fundamental concept underlying the organization of talk-in-interaction in CA is that of turn-taking. A turn can be described as a "unit of conversation, seen as something said by one speaker and preceded, followed, or both by a 'turn' of some other speaker" (Matthews, 1997, p. 386). Thus, when investigating how talk-in-interaction, i.e., a speech exchange, is organized and accomplished, CA is primarily concerned with the *sequential* organization of talk, i.e., how specific units of conversation (i.e., turns) are assembled (or *sequenced*) into larger units of conversation (i.e., *sequences*) by way of exchanging speech. This turn-taking system was first described in a seminal paper by Sacks et al. (1974), where the authors show how interactants' turns-at-talk are organized and transferred from one speaker to another. Specifically, each turn-at-talk is internally constructed of *turn construction*

units (TCUs), which can vary considerably in length, i.e., they can include lexical, phrasal, clausal, and sentential units (Sacks et al., 1974, p. 702). Thus, TCUs tend to roughly correspond to the structural linguistic units of speech, namely, words, phrases, and sentences (Hutchby & Wooffitt, 1998, p. 48).

Once a TCU is underway, speakers can generally recognize the type of TCU that is in progress and project the point at which it may come to a conclusion, i.e., the place where they could begin their own turn, if desired. These places between turns where speaker change can, but need not, occur are called *transition-relevance-places* (TRPs). Generally, one of three things happens at the TRP: the current speaker can either select a next turn speaker, another speaker can self-select to be the next turn speaker, or the current speaker can elect to keep speaking (Sacks et al., 1974, p. 704). When speaker change does occur, this projectability of the turn conclusion often leads to short overlaps at the TRP (that is, as speakers project the end of a current turn, they often begin their turn shortly before the current one ends); however, this overlap tends to be very short. Sacks et al. show that, overwhelmingly, only one speaker speaks at any given time and speaker change generally occurs in an orderly way, so that overlap of turns is at a minimum (pp. 702-706). It is through this turn-taking system that interaction becomes analyzable for the CA researcher.

Specifically, a recipient of talk orients to a current speaker's turn by displaying in the next turn, i.e., in his or her response to the previous turn, how and whether he or she understood that previous turn. This gives both the co-participant(s) in the conversation as well as the researcher a chance to analyze what is happening in

the conversation and assess how the recipient of the original talk understood this talk (i.e., the action contained in it). This also gives the original speaker a chance to correct his or her co-participants' understanding of the turn, if necessary. Hutchby and Wooffitt (1998, p. 15) call this the *next-turn proof procedure*. This mechanism is in operation throughout the conversation and is illustrated below:

<u>Turn 1 (speaker 1)</u>: speaker 1 produces an utterance

<u>Turn 2 (speaker 2)</u>: this is next-turn (NT) vis-à-vis turn 1 and speaker 2 displays here how (or whether) he or she understood turn 1

<u>Turn 3 (speaker 1)</u>: this turn offers speaker 1 a chance to correct speaker 2's understanding of turn 1 as displayed in turn 2; however, this is also in next-turn position vis-à-vis turn 2 and therefore displays to speaker 2 how (and whether) speaker 1 understood turn 2

<u>Turn 4 (speaker 2)</u>: this turn, in turn, offers speaker 2 a chance to correct speaker 1's understanding of turn 2 as displayed in turn 3; at the same time, this is also in next-turn position vis-à-vis turn 3 and therefore displays to speaker 1 how (and whether) speaker 2 understood turn 3

<u>Turn 5 (speaker 1)</u>: continues in the above manner

In this manner, interactants are continually involved in interactionally managing their participation in the conversation.

2.1.3. Adjacency Pairs

Often, turns in a conversation are organized into what is called an *adjacency* pair. This type of sequence refers to two utterances that generally occur adjacent to one another, occur in a related and predictable way, and are usually uttered by two different speakers (Schegloff & Sacks, 1973, pp. 295-296). This means that when the first part, i.e., the *first pair part*, of an adjacency pair occurs, it sets up a trajectory that requires the corresponding second pair part to occur. This relationship between the two pair parts of an adjacency pair is called *conditional relevance*, i.e., if the first pair part occurs (this is the condition), the second pair part becomes relevant (Hutchby & Wooffitt, 1998, p. 42). For example, an invitation (i.e., the first pair part) will generally require a response, i.e., the second pair part, whether it be a positive (an acceptance) or a negative (a rejection) response. Other adjacency pairs are, for example, questions and answers, offers and responses (i.e., an acceptance or a rejections), or, as will be discussed in more detail later, repair sequences. 'Adjacent' here, however, does not necessarily mean that the second pair part will occur in the next, i.e., serially adjacent, turn, but may in fact occur later; specifically, it may be displaced by other turns occurring in between the two pair parts (Hutchby & Wooffitt, 1998, p. 40). This occurs, for example, when an insertion sequence becomes relevant during the first pair part. Consider the following example presented by Hutchby and Woofitt (1998, p. 40):

(1) [Levinson 1983, p. 304]

```
1 A: Can I have a bottle of Mich?
2 B: Are you over twenty-one?
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3 A: No.

4 B: No.

The first pair part of the original adjacency pair here is a question and occurs in line

1. This sets up a question-answer trajectory and requires the second pair part, i.e., the answer, to occur eventually. However, because one has to be over twenty-one years old to buy a beer, the action of establishing A's age becomes relevant with this question as well, and, in fact, needs to be accomplished before the original question can be answered. Hence, B begins an insertion sequence (another question-answer adjacency pair) in line 2 in order to accomplish this action. Only after the insertion sequence ends in line 3 can the original second pair part, i.e., the answer, occur in line

4. Thus, in the adjacency pair sequence of question-answer, the answer, i.e., the second pair part, still follows the first pair part sequentially (i.e., in a sequentially adjacent position); however, it does not follow it serially, i.e., in the serially adjacent turn.

Due to the fact that the two pair parts in an adjacency pair have a relationship of conditional relevance, there may be interactional consequences if the second pair part does not occur. Specifically, the uttering of a first pair part makes the second pair part relevant; therefore, if no second pair part is issued, this absence will be 'heard' as the required second pair part (Egbert, 2002, p. 56). Often, failure to issue a second pair part is interpreted as an act of ignoring (Egbert, 2002, p. 56) and may be sanctionable by the coparticipant. Consider the following example:⁵

(2) [Atkinson and Drew, 1979, p. 52]

A: Is there something bothering you or not?

(1.0)
Yes or no
(1.5)
Eh?
B: No.

After A asks the question "Is there something bothering you or not," B does not respond, despite the fact that this question sets up the question-answer adjacency pair trajectory. As is evident in the two following prompts by A ('yes or no' and 'eh?'), this is not an acceptable action for A; i.e., it appears to be a dispreferred action. It is clear then that while it is possible to either provide or withhold a second pair part, the two actions are not equal in their preference. In fact, in this example, the withholding of the second pair part is even sanctioned: A continues to prompt until B finally provides a second pair part.

2.1.4. Preference

In CA, the question of whether an action is preferred or dispreferred is not a question of the motivations of the speakers (Schegloff et al., 1977, p. 362). In fact, even though one or both of the speakers involved in an invitation sequence may want (or *prefer*) the invitation to be rejected, interactionally, this rejection is a dispreferred action. Rather, in CA, preference is related to the sequential organization of the talk-in-interaction. Even though agreement (e.g., an acceptance of an invitation) is in fact generally the preferred response and disagreement (e.g., a rejection) is in fact generally the dispreferred response, this is not related to the motivations of the speakers. Instead, the elements that distinguish dispreferred actions from preferred

actions are structural. Specifically, dispreferred actions, as opposed to preferred actions, are often marked or delayed (Schegloff et al., 1977, p. 362). Such structural markers may include, among others, lexical dispreference markers (Pomerantz, 1984) such as 'well' or 'um' or a delay of the actual negative elements until late in the utterance. Similarly, the dispreference of the (non-existent) second pair part in example (2) above (pages 27-28) is not necessarily related to the motivations of A or B (although they may coincide with the structural dispreference), but rather to the conditional relevance that operates in adjacency pairs (here: a question-answer trajectory) and requires a second pair part to occur. The organization of repair is, in fact, a good example of how preference structure is tied to the sequential organization of talk-in-interaction; I will therefore return to this issue in more detail later in this chapter.

2.2. Data Collection, Transcription, and Analysis

2.2.1. Data Collection

In analyzing naturally-occurring talk-in-interaction, CA works exclusively with audio- or video-recorded data. Specifically, telephone interaction tends to be audio-recorded, while face-to-face interaction tends to be video-recorded, except in situation where this would be problematic (such as, for example, in sensitive doctor-patient interaction). The tendency to video-record face-to-face interaction whenever possible makes sense as non-verbal features in a conversation (such as mimicry, gestures, or eye-gaze) are then available to the conversation participants for

interpreting turns and it has repeatedly been shown that these can, in fact, be salient features in the organization of talk-in-interaction (e.g., Goodwin & Goodwin, 1986; Streeck, 1993, 1994). For an accurate analysis of the data, it is therefore imperative for the researcher to have access to these features, as well.

Accordingly, the data for this project was collected by video-recording three different groups of students. One group, henceforth referred to as *Group 1*, consists of five students enrolled in a second semester *Beginning German II* course at a large public American university. The second group, henceforth referred to as *Group 2*, consists of six students enrolled in a third semester *Intermediate German I* course at the same university, and the third group (*Group 3*) consists of seven students who were participating in an intensive six-week summer study abroad program in Germany.⁶ While on the study abroad program, they completed the same third semester *Intermediate German I* course, among other courses (e.g., a grammar review course or a course on German culture), that Group 2 took at the university.⁷

The data was collected by video-recording informal discussions in each group that took place towards the end of the semester (for Groups 1 and 2) or at the end of the six-week intensive study abroad program (Group 3), respectively. Each discussion lasted approximately 30 minutes and a total of approximately 100 minutes of discussion was used for the final analysis. In all groups, this discussion took place during the time that a regular class session was scheduled; however, instead of a regularly conducted class (the teachers were, in fact, absent), students were asked to informally talk about any topic of interest to them, whether it be class-related or not.

Students were also advised, both orally as well as in writing, that their conversations would not be graded in any way and that what they said or how they said it would have no influence on their performance in the German class they were enrolled in at the time.

However, a common problem with this type of set-up, i.e., video-recording the interaction, is the presence of the video camera. While no observer is actually present in the room, Labov's (1972) observer's paradox, which posits that an observer's presence during an interaction may affect the interaction in such a way that it may change the normal development of the unfolding interaction, may still constitute a problem, as a video camera is decidedly present in lieu of the observer. In fact, during the initial recordings, there were various obvious – both verbal and nonverbal - references to the camera or its presence, such as comments (at one point, students even explicitly discussed the presence of the camera and how it affected them), nervous laughter, giggling, or glances towards the camera. However, discussions were conducted in each group at various (at least three) different times during the semester or study abroad program, respectively. In all groups, the data that was used for the final analysis is not the data collected during the first time the students were recorded with a video camera during talk-in-interaction. Thus, in the recordings used for analysis, it in fact appears that students had become familiar and comfortable with the camera, as there are neither specific (verbal or nonverbal) references to the camera, nor signs of uneasiness related to the camera, as were noted during initial filming. It appears then that students were no longer particularly aware of or

distracted by the video camera at this point. This supports a claim by Duranti (1997), who argues that the effect of the observer's presence may be temporary and subside when the novelty effect has worn off (as cited in Kasper & Rose, 2002, p. 83).

In addition to the observer's paradox, another common point of contention with the data collection set-up described above is whether it resembles naturally-occurring interaction or is more representative of classroom interaction, a type of institutional interaction. In CA, institutional interaction of different types (e.g., in courts, in schools, in hospitals, etc.) exists in its own right and, due to the various restrictions it imposes on the talk-in-interaction vis-à-vis naturally-occurring talk-in-interaction, is generally described as a different *speech exchange system*.

Among various speech exchange systems that have been investigated by CA scholars, the classroom environment in particular has often been the focus of such research and some scholars have specifically examined the organization of repair in this environment (e.g., Jung, 1999; Liebscher & Dailey-O'Cain, 2003; McHoul, 1990; Seedhouse, 2004; van Lier, 1988). While such research has shown certain differences in the organization of repair (often of a quantitative nature; e.g., certain repair trajectories may be more common in classroom interaction than in naturally-occurring interaction) in this type of setting, "no single, monolithic organization of repair in the L2 classroom" (Seedhouse, 2004, p. 179) could be found. It would therefore be difficult to contrast the organization of repair in naturally-occurring conversation with 'the organization of repair in classroom interaction', as no such uniform system exists.

I argue, however, that no such contrasting is necessary, as the set-up in my study closely resembles naturally-occurring interaction. Specifically, unlike in typical classroom settings, students are not in the presence of a teacher and do not sit as normally arranged in the classroom (most often, they sit in a circle facing the other students). No specific task or topic of discussion was given and no one was required to contribute to the discussion, neither at any given point in the conversation nor at all (however, all students did engage in the conversation). This closely resembles the conditions surrounding naturally-occurring conversation. However, the fact that the data was collected in the context of a German language class these students were taking, i.e., in an educational environment, may nevertheless surface in the talk-in-interaction and, if this is deemed the case, will need to be accounted for in any explication of repair phenomena encountered.

A final issue, particularly from an SLA perspective, that might arise from the data collection set-up in this study is again related to its speech exchange system. Particularly, while the system closely approximates naturally-occurring conversation, it does not include any native speakers and although "one pedagogical practice believed to facilitate L2 development is placing students in pairs or small groups for oral activities" (Buckwalter, 2001, p. 380) in the language classroom, the learner, i.e., the NNS, is still often seen as 'deficient' vis-à-vis the NS in SLA research and, consequently, as striving to reach the NS 'standard', often via the aid of such a native speaker in NS-NNS interaction. This view, however, would appear to call into question the usefulness of NNS peer-peer interaction on which the data in this

dissertation are based. This stance of the NNS as being a priori different from the native speaker has, however, become a point of debate in recent years (Kasper, 1995; Firth & Wagner, 1997; various response articles to the latter, e.g., Gass, 1998; Long, 1997; Poulisse, 1997) and CA researchers in particular view the non-nativeness of a speaker as no different from any other factors, i.e., in order for it to be considered relevant, participants need to overtly orient to it in the course of the interaction (see page 22).

Furthermore, numerous studies that investigated NNS-NNS interaction have in fact repeatedly shown this type of interaction to be beneficial for SLA. In a review paper on peer-peer dialogue studies, Swain, Brooks, and Tocalli-Beller (2002), for example, reported on several studies investigating spoken interaction between NNSs. Specifically, they looked at studies investigating 'collaborative dialogue' (Swain, 1997), where "learners work together to solve linguistic problems and/or co-construct language or knowledge about language" (Swain et al., 2002, p. 172). Among the studies reviewed were Lynch and Maclean (2001) and Ohta (2001), both of which concluded that peer-peer dialogue resulted in improved language performance. Similar results were reported in several other studies (e.g., Donato, 1994; Kowal & Swain, 1997; Ohta, 2000). Ohta (1995) concludes that "the opportunity to experiment with the language in a comfortable environment is a necessary component of L2 acquisition, which, while common in naturalistic learning settings, may be restricted in L2 classrooms" (p. 116). The type of interaction featured in this dissertation, then, is based on a form of dialogue that not only approximates

naturally-occurring interaction prevalent in CA (as discussed above), but has also been shown to be beneficial to language acquisition in SLA.

2.2.2. Transcription

After video-recording the data, as described above, the talk-in-interaction was transcribed according to transcription conventions that were first developed primarily by Gail Jefferson (1983, 1985; Heritage, 1984). While slightly different transcription conventions have been developed by other researchers, particularly, the GAT system (Selting et al., 1998) for German language data, due to its wide international acceptance, I will primarily follow Jefferson's system in this dissertation. The transcription system is designed to allow for the transcription of every detail in the conversation, including non-verbal aspects such as eye-gaze or gestures, as well as pauses, in- and out-breaths, or non-lexical speech perturbations (such as 'um' or 'uh'). Following is a list of transcription symbols used in this dissertation along with an explanation of what they signify:

- . denotes falling intonation
- denotes continuing intonation
- ? denotes rising intonation
- (.) a period inside parentheses indicates a pause lasting less than one tenth of a second
- (0.2) numbers in parentheses show the exact length (in seconds) of a pause lasting longer than one tenth of a second
- <u>a</u> underlining indicates an emphasis by the speaker
- A capital letters denote talk that is louder than the surrounding talk
- a: a colon denotes a lengthened sound (the more colons, the longer the sound)
- a- hyphens indicate a cut-off or an abrupt ending of a word
- = indicates 'latching' between two words (i.e., there is no discernable pause between them)
- h 'h' indicates an audible out-breath (the more 'h's, the longer the out-breath)

- .h denotes an audible in-breath (the more 'h's, the longer the in-breath)
- [a square bracket indicates the beginning of concurrent talk or the beginning of an overlap of talk and non-verbal features in the talk
- () empty parentheses indicate that there is talk, but that it was not audible or understandable to the transcriber
- (xyz) words in parentheses represent a possible understanding of the uttered word(s) when they are not clearly audible
- °xyz° words between degree signs denote talk that is quieter than the surrounding talk (e.g., whispering)
- >xyz< word in outward-facing angle brackets denote talk that is faster than the surrounding talk
- <xyz> words in inward-facing angle brackets denote talk that is slower than the surrounding talk
- → locates the turn(s) in the segment on which there is a particular focus

Clearly, the reading of transcripts using this notation system can be time-consuming for readers unfamiliar with the data or the notation system. Therefore, following Egbert (2002), I will use as few excerpts from the data as possible, using the same excerpts at different points in the analysis, should they lend themselves to exemplify different aspects of the talk-in-interaction. Furthermore, all excerpts will be numbered consecutively throughout the entire text for easy and unambiguous reference. A list of all excerpts is provided in the appendix.

2.2.3. Data Analysis

CA is primarily a descriptive research method, i.e., it is qualitative in nature and seeks to describe and explicate how social interaction as mediated through language is organized. Quantification, on the other hand, is rarely part of studies in CA, although scholars frequently employ a concept called *informal quantification*, where instances are not counted, but quantitative concepts are represented using words such as *overwhelmingly*, *regularly*, or *ordinarily* (Schegloff, 1993, p. 99).

There are several reasons for this. A large problem that CA researchers see with quantification is the difficulty inherent in quantifying certain phenomena. In Schegloff (1993), he uses the example of laughter and the associated quantitative measure of *laughter per minute* as an indicator of the level of sociability of interactants to illustrate this difficulty. Specifically, he argues that the strictly quantitative measure of laughter per minute is problematic in this context because it does not take into account that laughter is a responsive action (p. 104); i.e., laughter occurs in response to some other action. That means that in a conversation about certain topics or in certain types of interactions, laughter may not occur because the context or the topic of conversation is not conducive to laughter; this can therefore not be related to the sociability of the participants in the interaction. Furthermore, laughter may occur where it is not appropriate or, vice versa, fail to occur where it would be appropriate. When this happens, it generally serves specific interactional purposes and can thus again not be related to the sociability of participants. In short, a quantitative measure of laugher per minute does not take interactional considerations into account and thus fails to regard as important basic fundamentals of talk-in-interaction.

Another point of contention about using quantitative methods to study talk-ininteraction is the strongly held belief in CA that statistical significance is not the only form of significance (Schegloff, 1993, p. 101). Specifically, CA regards that to which speakers in an interaction orient as relevant and therefore significant, regardless of how often it occurs. In fact, even the absence of a certain occurrence may be evidence for or of a particular principle (Schegloff, 1993, p. 110); however, these instances would likely fail to appear as evidence in quantitative studies.

A final problem with quantification in CA is the fact that in order to be counted at all, a phenomenon needs to be very clearly defined (Egbert, 2002); i.e., it needs to be clear what it is that is being counted and what counts as an instance of the phenomenon (Schegloff, 1993, p. 107), so that all instances counted as being in the same category actually are. However, one of the concepts in CA that are considered to be fairly well-defined, and thus possibly countable, is other-initiation of repair (Egbert, 2002; Schegloff, 1993, p. 115). While I am nevertheless not carrying out a statistical analysis in this dissertation, I have, however, decided to include some quantitative data in my analysis, primarily to help compare and contrast repair behavior between different groups. This quantitative data is meant to supplement the primarily qualitative analysis carried out within the framework of CA. Thus, while I may discuss the number of certain repair sequences in specific groups as compared to other groups in the data, this is not meant to be, and in fact is not, a substitute for a close analysis of these sequences; rather, it is meant to complement the analysis of the individual sequences to further illuminate our understanding of repair sequences in this data.

2.3. Repair

2.3.1. Definition

Repair is a central principle both in CA and in human interaction in general. Communication is based on mutual understanding among speakers, with all speakers involved in continually interactionally constructing it. Clearly, however, there is also continually a chance for problems to occur in establishing or maintaining this mutual understanding, or intersubjectivity. The mechanism that is available to speakers to address such disruptions of intersubjectivity and 'repair' them is the repair mechanism. Repair is therefore a mechanism of primary importance for the organization of social interaction (Schegloff et al., 1977, p. 381). While the organization of repair as a systematic (i.e., regular and rule-governed) mechanism was first described in a series of publications on the organization of talk-in-interaction by Schegloff et al. (1977; Sacks et al., 1974), it has since been researched in more detail, various contexts (e.g., Kasper, 1985; McHoul, 1990; Seedhouse, 1999, 2004 for classroom interaction; Philips, 1992 for courtroom interaction) and many languages (e.g., Akindele, 1991 for Yoruba; Chui, 1996 and Lin, 1996 for Chinese; Egbert, 2002 for German; Fox, Hayashi, & Jasperson, 1996 for Japanese; Streeck, 1996 for Ilokano; Wouk, 2005 for Indonesian).

In its most basic form, a repair sequence consists of three parts, 1) the *trouble source* (TS) or *repairable*, i.e., the problematic item(s), 2) the *repair initiation* (RI), i.e., where and how a speaker indicates that there is a problem, and 3) the *repair operation* (RO) or *repair proper*, i.e., where the problem gets resolved. The repair

initiation and repair operation form an adjacency pair, with the repair initiation constituting the first pair part and thereby making the second pair part (i.e., the repair operation) sequentially relevant. Thus, the issuing of a repair initiation typically begins an insertion sequence and thus often temporarily halts the flow of conversation until the trouble has been resolved in the repair operation, at which point the original conversation can continue.

2.3.2. Types of Repair

There are four different types of repair sequences, which are classified according to who performs the repair initiation and the repair operation, respectively. Each can either be performed by the trouble source turn speaker, i.e., the 'self', or by another speaker, i.e., the 'other'. A self-initiation, then, is an initiation by the trouble source turn speaker in response to a problem in that person's own speaking, while an other-initiation is an initiation by a listener who thereby indicates a problem with hearing or understanding someone else's talk. Thus, the following possible repair trajectories exist: self-initiated self-repair (where the trouble source turn speaker indicates and repairs a problem with his or her own speech), self-initiated other-repair (where the trouble source turn speaker indicates a problem with his or her own speech and another speaker repairs the problem), other-initiated self-repair (where a speaker indicates a problem he or she has with an utterance by the trouble source turn speaker, which the latter then repairs), and other-initiated other-repair (where a speaker both

indicates and repairs a problem he or she is experiencing with the trouble source turn speaker's turn). The following examples will illustrate these four trajectories: self-initiated self-repair:

(3) [Goodwin, 1987, p. 119, as cited in Egbert, 2002, p.12]

Jane: we went t- i went to bed really early. TS + RI + RO self-initiated other-repair:

(4) [Plejert, 2003, p. 90]

other-initiated self-repair:

(5) [Schegloff et al., 1977, p. 367]

B:	Oh <u>Si</u> bbie's <u>si</u> stuh hadda	<pre>ba:by bo:way.</pre>	TS
A:	Who?		RI
В:	Sibbie's sister.		RO

other-initiated other-repair:

(6) [Lightbown & Spada, 1993, p. 76, as cited in Seedhouse, 2004, p. 146]

```
L: it bug me to have= TS

T: =it bugs me. it (bugzz) me RI + RO
```

This latter category is what is sometimes, especially in SLA, referred to as 'correction'. However, it is important to note that in CA, 'repair' does not necessarily imply that there was a mistake; rather, repair mechanisms can deal with a variety of problems, including hearing, speaking, or understanding problems in the absence of

mistakes. A large number of problems is possible and nothing can really be excluded from being a potential trouble source (Schegloff et al., 1977, p. 363). Repair can, for example, also be used to address interactional problems, such as abrupt changes of topic (Drew, 1997), other sequential problems (Drew, 1997), disruption of eyecontact (Goodwin, 1980, 1981), or problems of agreement among speakers even if there was no actual error (Egbert, 2002), as well as serve other interactional purposes that do not in fact represent a 'problem' as such, for example, changes in group structure (Egbert, 1997), where repair can function as an entry and exit device. Clearly, then, repair also serves to negotiate interpersonal or interactional issues that are unrelated to linguistic or factual errors. This is particularly important in respect to interaction involving non-native speakers because it is clear, then, that repair is also a common occurrence in native speakers (as opposed to a mechanism for NNSs to repair linguistic errors). In fact, at times, even NSs use repair to deal with linguistic problems (Brouwer, 2003, p. 536). Thus, repair in NNS speech cannot necessarily be attributed to 'incorrect' or 'deficient' speech. This is different from the conception of 'correction' as it is often understood within the context of SLA studies, which excludes the possibility that there may be difficulties with anything other than actual errors (Buckwalter, 2001, p. 381) in NNS interaction.

2.3.3. Preference Structure

The four repair trajectories named above are not equally common and were presented (on page 41) in a certain order of preference. Specifically, self-initiated

self-repair is by far the most common type of repair, while at the other end of the spectrum, other-initiated other-repair, i.e., the 'corrections', is in fact very rare. This is perhaps not surprising given that overt corrections tend to draw attention to someone else's errors (Hutchby & Wooffitt, 1998, p. 68), which is a dispreferred action. This is evident in the fact that other-repair in general is often mitigated or indirect; for example, there may be uncertainty markers or even small jokes in connection with the action of other-repair (Schegloff et al., 1977, p. 378). In fact, while self-repair is thus preferred over other-repair, self-initiation is also generally preferred over other-initiation. As was discussed in relation to preference structure earlier, this is not necessarily due to the fact that speakers do not want to other-initiate repair, but rather to the structural organization of repair sequences. This structural preference is related particularly to the *repair-initiation opportunity space* (Schegloff et al., 1977, p. 375) that opens up at the beginning of the repair sequence and in which the opportunities for self-initiation and self-repair regularly precede those for other-initiation and other-repair (Schegloff et al., 1977). Specifically, the first place a repair-initiation can occur is within a trouble source turn or immediately following it. This usually occurs during problems with speaking; specifically, the current speaker is then the first person to be aware of a problem with speaking in his or her turn and is therefore first in a position to initiate repair while the turn is still in progress or immediately following it.

While self-initiation can definitely lead to other-repair, when it does, this other-repair is often preceded by a short pause, which is, in essence, designed to give

the trouble source turn speaker a chance to issue a self-repair before another speaker does. Similarly, other-initiations are often preceded by a small pause as well, again designed to afford 'self', i.e., the trouble source turn speaker, a chance to self-initiate repair before an other-initiation even becomes necessary (Schegloff et al., 1977, p. 374) and may be issued in next turn. When other-initiations do occur, however, they overwhelmingly occur in this position, i.e., the next-turn position (Schegloff et al., 1977, p. 367), which is the structurally next position (following the trouble source turn) in which a repair initiation can occur. Clearly, then, the structurally first position for self-initiation, i.e., inside or immediately following the trouble source turn, regularly precedes the first position for other-initiation, i.e., in next turn. Other-initiations in themselves are therefore (structurally) dispreferred actions. Finally, other-initiations, like self-initiations, tend to be followed by self-repair, with other-repair only following if the opportunity for self-repair is not taken. Thus, opportunities for self-repair also regularly precede those for other-repair.

However, the repair-initiation opportunity space does not close after next turn; instead, another space for self-initiation opens up, which is generally taken if the trouble source turn speaker notices after next turn that the other interactant(s) may have misunderstood his or her original utterance. The following is an example of this type of misunderstanding:

(7) [Schegloff et al., 1977, p. 366]

Annie: Which one::s are closed, an which ones are open.

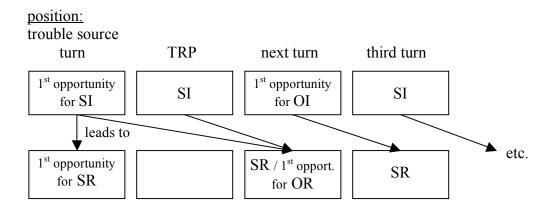
Zebrach: Most of 'em. This, this, // this,

Annie: I 'on't mean on the shelters, I $${\rm RI}+{\rm RO}$$

mean on the roads.

Zebrach: Oh:.

This is called *third-turn repair*. The following schema illustrates the basic preference structure in repair sequences.¹⁰ Note that self-initiation and self-repair are abbreviated as SI and SR, respectively, and other-initiation and other-repair are abbreviated as OI and OR, respectively.



There are, then, four positions from which repair most often gets initiated (i.e., from within the trouble source turn, transition-relevance-place, next turn, or third turn) and three of them are in positions in which the trouble source turn speaker (i.e., self) holds the floor (within the trouble source turn, transition-relevance-place, and third turn). Thus, a structural relationship between the turn-taking system and the preference for self-initiation and —repair over other-initiation and —repair is clearly evident in the organization of repair.

Overall, then, the repair-initiation opportunity space is rather small, usually lasting three turns starting with the trouble source turn (Schegloff et al., 1977, p. 375);

thus, all repair initiations, self-or other-initiated, tend to occur in close proximity to the trouble source. Thus, the farther from the trouble source the conversation progresses, the smaller the repair-initiation opportunity space gets and consequently, the number of occurrences of repair decreases (Egbert, 2002, p. 278). This makes sense as a larger distance from the trouble source would make the relationship between the trouble source and the repair initiation increasingly difficult to reconstruct for interlocutors. Given that repair initiations are also issued in response to sequential types of troubles involving abrupt shifts of topic or apparently inapposite responses (Drew, 1997, see page 42), initiating repair far away from the trouble source would likely lead to further repair initiations instead of resolving troubles.

2.3.4. Other-Initiated Repair

Due to space limitations, of the four trajectories discussed above, only other-initiated self-repair will be the subject of this dissertation. This trajectory was primarily chosen for its importance as a resource for language learners (see section 1.3.3). Overall, the organization of other-initiated repair has been shown to be structurally and interactionally similar in English and German (e.g., Egbert, 1996, 2002; Schegloff et al., 1977). However, there are factors that may influence the structure of such repair sequences. One is the number of parties involved in a conversation. While the basic trajectories of repair in general and other-initiated repair in particular all refer to 'self' and 'other', in multi-party interaction, there are

many potential 'others' and this can have interactional consequences for the structure of the other-initiated repair sequence. Specifically, (a) there may be talk by other people between the trouble source and the repair initiation, thereby pushing the repair initiation serially back, (b) there may be more than one repair initiation on the same trouble source by different speakers, or (c) third speakers may issue the repair operation before the original trouble source turn speaker (i.e., 'self', who is in a preferential position to issue the repair) does (Egbert, 2002, p. 158). All of these are factors that were indeed observed in the data and, where appropriate, will be discussed in more detail in the analysis.

Another factor that may influence other-initiated repair sequences is the distinction between NS repair behavior and that of NNSs. For a factor such as non-nativeness to be considered relevant in a conversation, the interlocutors have to orient to it in some way. However, while non-nativeness is thus not a factor that can, in CA, be considered a relevant (or, in fact, irrelevant) factor a priori, there has been research indicating that non-nativeness can be a relevant factor in other-initiated repair sequences (e.g., Egbert, 1998, 2002, 2004; Wong, 2000). Non-nativeness may, for example, influence the structure of the repair sequence in that it can make it more elaborate and complex (Egbert, 2004, p. 1483) or result in a regular delay of the other-initiation beyond next turn (Wong, 2000). Also, the speech used may not be native-like and in response, the type of trouble source that appears may be different; for example, wrong pronunciation or a word that is not understood by others may become an issue (Egbert, 2002, p. 176). Furthermore, transfer of repair strategies

from the native language (the L1) may lead to differences (Egbert, 1998). However, none of these factors necessarily change the organization of repair on a fundamental level; rather, Egbert (2004) argues that this is evidence that the repair mechanisms is both flexible, i.e., it can be stretched to accommodate the non-nativeness, and robust, i.e., it can be successfully applied even under straining circumstances (p. 1494). Specific findings as to how this non-nativeness influences the repair strategies in the data in this dissertation will be discussed in subsequent chapters. It is clear, however, that both the multi-party interaction set-up as well as the non-nativeness of the learners have the potential to surface as relevant factors influencing the organization of repair in this data.

2.4. Conclusion

In this chapter, I have presented the methodological foundation for this project and introduced various methodological and theoretical concepts that are important for the analysis in subsequent chapters. Specifically, I have introduced the concepts of CA and conversational repair. The particular advantages of CA as a research method in SLA can be summarized as follows:

□ it uses audio- and video-recordings of authentic conversations
 □ the object of research is naturally-occurring interaction
 □ it examines language (verbal and nonverbal actions) in talk-in-interaction
 □ in order to show how the orientation to factors that are relevant to the interactants transpires in their behavior, every analysis is directly rooted in the data
 (Egbert, 2002, pp. 27-28, my translation)

In line with this research paradigm, I have collected video-recorded data from different groups of students engaged in what I have argued closely resembles naturally-occurring talk-in-interaction, in order to analyze other-initiated repair sequences, i.e., those used to deal with troubles in hearing or understanding. I have argued that repair sequences in general and other-initiated repair sequences in particular serve a fundamental purpose in the organization of social interaction (which is the subject of CA) in that they allow interactants to deal with and eventually resolve troubles that occur during talk-in-interaction, thereby enabling them to establish and maintain the intersubjectivity on which human interaction is based.

3. Trouble Sources and the Repair Initiation

3.1. Types of Other-Initiation of Repair

initiating repair in American English in their seminal paper published in 1977 (pp. 367-368). It was subsequently found that the same five types also exist in German (e.g., Egbert, 1996, 2002). These thus serve as a point of departure in this chapter, given that all learners involved in the project are native speakers of English learning German. In the following, I will briefly describe these five types, using examples from the data. 11 They will be discussed in order of increasing specificity, i.e., they become increasingly specific in locating and identifying the trouble source: 1) Non-specified repair initiations. This class includes expressions such as 'huh?' or 'what?' in English or 'hm?', 'bitte?' (approximately: 'pardon?'), or 'was?' ('what?') in German, but also so-called *miscellanous missed* such as 'I didn't get that' or 'Ich versteh' Sie kaum' (i.e., 'I can barely understand/hear you', during a telephone call) (Egbert, 2002, p. 140). However, not all instances of 'what?' or 'was?' are necessarily repair initiations; they can also be used to express surprise or disbelief. In those instances, they do not address a problem in hearing or understanding (which is the definition of repair) and do therefore not function as repair initiations (Egbert, 2002, p. 153). Such expressions of surprise are often distinguished from repair initiations through intonation, i.e., they exhibit a higher tone level or extra strong accent (Selting, 1988, p. 299).¹²

Other-initiation of repair is fairly well-researched in both German and

English. Primarily, Schegloff et al. distinguished between five main means of other-

Non-specified repair initiations represent the most general type of other-initiation in that they do not locate the specific trouble source, but rather target the entire preceding turn (Egbert, 2002, p. 140):

(8) [Esperanto, Group 1]

While there are numerous non-specified repair initiations available to the interactants (see above), these are not always interchangeable. Egbert (1996), for example, has shown that the German non-specified repair initiation 'bitte?' (approximately: 'pardon?') tends to predominantly occur in very specific situations, namely, when eye-contact is lacking (i.e., during telephone conversations or disrupted eye-gaze in face-to-face interaction). Thus, the occurrence of specific repair initiations even within a class of repair initiations can depend on contextual or interactional circumstances, such as the participation framework (a telephone conversation versus face-to-face interaction) or eye-gaze.

2) *Question words*, e.g., 'who?' or 'when?'. Question words are more specific than non-specified repair initiations in that they indicate more specifically which part of the targeted turn is the trouble source, i.e., where in the trouble source turn the trouble source is located.

(9) [Karl, Group 2]

```
TS
          Rachel:
                    ich denke dass karl, (0.2) ist wie eddie
                       think that Karl
                                           is like Eddie
02
                    izzard=
                    Izzard
03 → RI
         Steve:
                    wer? wer?
                    who? who?
04
    RO
          Rachel:
                   (ka::rl)
```

In this class of repair initiations, there are some structural differences between English and German. Specifically, in German, certain question words such as 'welcher' ('which') or 'wer' ('who') are inflected for grammatical case, thus necessitating a certain level of analysis of the trouble source turn prior to initiating the repair (Egbert, 1998), but also allowing for a more precise identification of the trouble source (e.g., whether it concerns the grammatical subject or a grammatical object of the trouble source turn) that English does not offer.

3) <u>A partial repeat + a question word</u>. This type of repair initiation combines a partial repeat of the trouble source and a question word. By repeating a specific part of the trouble source, this type of repair initiation allows for a fairly specific identification of the trouble source.

(10) [Bean, Group 3]

```
01 TS Clint: oh. \underline{sean} bean.

02 (.)

03 \rightarrow RI Sally: sean (was)?

\underline{sean} what?
```

4) <u>A partial repeat of the trouble source</u>. This is one of the most specific types of repair initiations available to interactants to indicate troubles in hearing or understanding:

(11) [Lass uns, Group 2]

```
01
     TS
           Rachel:
                        lass un:s (.) etwas machen
                                   something do
                        let us
02 → RI
           Daphne:
                        [lass uns?
                        [let us?
03
          Meq:
                        [m hm (.) [ja
                        [m hm
                                  [yes
04
     RO
                                   [lass- (.) lass uns lesen
           Rachel:
                                   [let-
                                             let us read
```

5) <u>Candidate understandings</u>. In candidate understandings, the speaker initiating the repair not only locates the trouble source, but also offers a possible understanding of it; that is, a candidate understanding is often an interpretation or a reformulation of the trouble source turn (Egbert, 2002, p. 144). Thus, candidate understandings represent the most specific type of repair initiation:

(12) [Tina, Group 2]¹³

```
01
                      wie reagiert (.) was äh äh denkt sie
     TS
           Meg:
                                        what uh uh thinks she
                      how does she react, what does she think?
02
                      (1.5)
03 → RI
           Steve:
                      was denkt sie über die tina ist (.) weg?
                      what thinks she about the Tina is gone?
                      what does she think about Tina being gone?
04
     RO
           Meg:
                      ja hah
                      yes heh
```

In English, such candidate understandings are often structured as 'y'mean + a possible understanding of the trouble source' (Schegloff et al., 1977, p. 368). While this form of candidate understanding can also be found in German, the corresponding 'meins du' (literally: 'mean you') tends to be post-positioned (Egbert, 2002, p. 145), i.e., it follows the possible understanding that is offered in the repair initiation, rather

than precede it, as it does in English. The following two examples will illustrate this structural difference between the two languages:

(13) [Schegloff et al., 1977, p. 369]

```
A: How long y'gonna be here?
B: Uh- not too long. Uh just til uh Monday.
→ A: Til- oh yih mean like a week f'm tomorrow.
B: Yah.
```

(14) [Egbert, 2002, p. 145]

```
→ Ruth: flo:rian is sauer meins du?

florian is mad mean you

You mean Florian is mad?
```

Egbert (2002) points out that this structural difference means that the candidate understanding may be recognized as such, i.e., as a repair initiation, only rather late in German, while this resource is immediately available at the beginning of the turn in English (p. 145). It is possible that this could have interactional consequences.

While these five types of repair initiations occur in both English and German, Egbert (2002) has found two additional categories of other-initiation that appear to be specific to German, namely *wie:* + *Zusatz* ('how:' + addition) and *positioned questions*. These positioned questions consist of a question word – usually 'was', 'wer', or 'wo' ('what', 'who', or 'where') – plus an identification of the trouble source turn. This identification of the trouble source turn, however, is not a partial repeat of it, thereby clearly distinguishing positioned questions from partial repeats plus question words. Instead, the identification always contains a *pro-word*, i.e., a word that constitutes a substitute of something that was previously mentioned in the conversation. Consider the following example of a positioned question:

(15) [Egbert, 2002, p. 149], translation mine

```
O2 Paul: ich hab letztens einm ingenieur von ford n

I have recently (to) an engineer from ford a

O3 audi, (0.5) verkauft
audi sold

((Zeilen 4-32 ausgelassen))
lines 4-32 left out

O3 Robi: we:r war da=da:?
who was there then

O5 Paul: tch! n ford ingenieur
tch a ford engineer
```

As in the example above, positioned questions tend to be relatively far removed from the trouble source turn (in Egbert's example, there are 28 lines of transcript between the troubles source and the positioned question). This is unusual and different from all other types of other-initations, which generally overwhelmingly occur in next-turn position, i.e., immediately following the trouble source (Schegloff et al., 1977, p. 367).

The 'wie: plus addition' repair initiation format consists of a lengthened 'wie:' ('how:') plus a partial repeat, which allows for a relatively specific identification of the trouble source. Consider the following example by Egbert (2002):

(16) [Egbert, 2002, p. 150], simplified, translations mine

```
01
     Pia:
             un wat die alle mit ha:ben so jetz diese- diese::-
             and what they all with have so now these these
             and all the things they take with them now, these
02
     Pia:
             [stöckskes
             [sticks
03
     Paula: [stöcke,
             [sticks
04
             (0.2)
     Kerstin: also- (0.1) ich bin s letzte: mal eh: [m:
05
              well I am the last time uh [m
```

Including the two types of repair initiation found in German, Egbert (2002) presents the final order of repair initiation techniques as follows (p. 152):

non-specified repair initiations
question words
positioned questions
partial repeats
partial repeat + question word
wie: + addition
candidate understandings

When native speakers select from among the other-initiation repair techniques available to them, they do not, however, select them randomly. Specifically, in German and English, native speakers tend to select a repair initiation that is rather specific, which suggests a selection mechanism that prefers stronger types of repair initiations over weaker ones (Schegloff et al., 1977, p. 369). Egbert (2002, p. 152) formulates this principle as follows:

Der Sprecher der Reparatur-Initiierung wählt die spezifischste Form, um dem Problemquellen-Sprecher eine möglichst große Hilfe zu bieten, die Problemquelle zu identifizieren. ¹⁴

This suggests a relationship between the trouble source and the repair initiation, i.e., repair-initiating speakers select a repair initiation technique that is specific enough to clearly identify the particular trouble source in question, but not more specific than

necessary. Thus, speakers may not necessarily always prefer strong repair initiations; rather, they select a repair initiation that is appropriate to the trouble source, which means that they may tend to select less specific types first and use the respectively more specific forms only if necessary. This principle is evident, for example, in the case of *multiples* (i.e., repair sequences that require more than one repair initiation to get resolved), where a less specific repair initiation is selected first but fails to resolve the trouble, after which (but only then) a second (more specific) repair initiation is used to resolve the problem (Schegloff et al., 1977). This suggests that speakers may in fact tend to prefer less specific repair initiations over more specific ones, with the question of how unspecific is appropriate being dependent on the trouble source. Therefore, the term 'more (or less) specific' is a relative term; i.e., vis-à-vis a non-specified repair initiation, a question word is more specific, while vis-à-vis a candidate understanding, it is quite unspecific, and it may depend on the trouble source which type of repair initiation is initially chosen.

While arranging repair initiation techniques according to their level of specificity in their ability to locate the trouble source is widely accepted, there are also other principles according to which these repair initiation techniques can be arranged. Specifically, Svennevig (2008) argues that they may be arranged in an order of preference that is related to the source of the problem, namely problems of hearing, problems of understanding, and problems of acceptability (p. 337), with problems of hearing being the least 'serious' type of problem and problems of acceptability (which arise from a perception on the part of the repair-initiating

speaker of something in the trouble source turn speaker's utterance being wrong or otherwise unacceptable) being the most 'serious' (because it is the most socially sensitive). In fact, following Pomerantz (1984, as cited in Svennevig, 2008), he finds that there is "a preference for the least serious construal of problems" (p. 339), i.e., speakers tend to prefer to treat problems as problems of hearing or understanding, which place the responsibility for the problem on the repair-initiating speaker because he or she fails to hear or understand the trouble source, before they will indicate a problem of acceptability, which places the responsibility for the problem on the trouble source turn speaker because it implies that he or she said something wrong or unacceptable (p. 339). Thus, even though there may be problems with acceptability, speakers tend to treat them as problems of hearing or understanding first, thereby in essence giving the trouble source turn speaker (i.e., self) a chance to self-repair this less serious problem before it is ever overtly identified as a more serious one. This selection principle is evident in several examples of multiples in Svennevig's Norwegian language data. Consider the following example for illustrative purposes:

(17) [Svennevig, 2008, p. 339]

- 1 C: Men (.) h er det bek- be- eh:: b- bakerjobb er det ↑bra eller ↓nei? 2 But (.) is it bek- be- uh: b- bakerjob is that good or no?
- 3 S: Bakerjobb?
- 4 Bakerjob?
- 5 C: Ja
- 6 Yeah
- $7 \qquad (3.2)$
- 8 S: .hh Ja bake brød er det du mener eller?
- 9 Well bake bread is that what you mean? (Yes bake bread is it that you mean or)

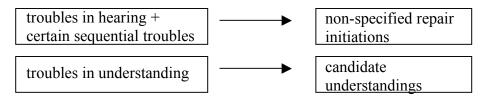
10 C: mh: baker i: den ligger på Hasle og den ()
11 mh baker in it's at Hasle and it ()

As Svennevig explains, in this excerpt, it is evident that speaker S first treats the problem he or she is experiencing with the word 'bakerjobb' as a problem with hearing. Specifically, S issues a partial repeat, thus providing a candidate hearing. It is only after this does not result in a resolution of the trouble that he or she provides a candidate understanding; thus, it is only now, on the second attempt and after a lengthy pause (3.2 seconds), that the problem is presented as a problem with understanding rather than hearing.

According to Svennevig (2008), then, repair initiations are related to the types of trouble sources they are used to treat, a relationship that is often questioned (p. 347). Specifically, he shows that with the less serious types of trouble sources (primarily hearing, but also understanding), speakers tend to select more specific types of repair initiations (i.e., those that present a candidate solution to the problem), while with more serious types of trouble sources (i.e., problems of acceptability), speakers tend to choose less specific repair-initiating techniques (such as a non-specified repair initiation) that simply indicate the presence of a problem, rather than providing a candidate solution (p. 338).

Although Drew (1997) argues that "there is no single, determinate relationship between a particular source or kind of trouble, and ... [the] form of repair initiation" (p. 96), there are some research findings that, similar to Svennevig's, indicate a relationship of some kind between types of trouble sources and repair initiations, although this is by no means well-defined or definitive. Specifically, Svennevig

(2008) determined that non-specified repair initiations occur with problems of hearing and, consequently, argues that they are then, in fact, not very unspecific, but instead rather specific in indicating the type of trouble (p. 346). Drew's research (1997) adds specific types of sequential problems to the types of trouble sources that can trigger non-specified repair initiations.¹⁵ Specifically, he finds that this occurs with sequential problems where the trouble source turn does either not appear to be sequentially appropriate (e.g., there may be an apparently abrupt change of topic) or appears to be inappropriate vis-à-vis the prior turn (Drew, 1997, p. 98). In contrast to repair initiations and troubles with hearing or sequential troubles, repair initiations that appear in connection with troubles in understanding appear to be either little researched or less clearly related. However, Egbert (2002, p. 144) notes that candidate understandings are the only type of repair initiation where it is clear that there is a problem with understanding, rather than one of hearing, because an understanding attempt is already inherent in the repair initiation. Schematically, these findings to date regarding a connection between certain kinds of trouble sources and specific repair initiations can be represented as follows:



However, although there appears to be a connection between certain types of trouble sources and specific repair initiations, i.e., the appearance of certain repair initiations may indicate a particular type of trouble source, only the repair initiation

speaker knows what the type of problem is. That is, his or her co-participants, as well as the CA researcher, can only assess what is *presented* to them as being the problem by the repair-initiating speaker. As Svennevig's research shows, via the type of repair initiation chosen, more serious problems may at first be presented as less serious problems (i.e., problems of hearing). Thus, it is not always possible to determine what type of trouble source is present in a given repair sequence; however, it *is* often possible to determine what type of trouble source is *presented* to the co-participants as being present in the repair sequence.

3.2. Repair Initiations in Non-Native Speakers

While research on nonnative speakers of German has found that they tend to use many of the same *types* of other-initiation of repair as native speakers do, the selection principles for employing these types of other-initiations, however, appear to be different. Two studies by Egbert (1998) and Liebscher and Dailey-O'Cain (2003) investigating other-initiated repair in nonnative speakers of German both found that learners of German tended to overwhelmingly select the most specific types of repair initiations possible. In Egbert's study on first-year students of German, partial repeats were by far the most commonly used type of other-initiation, followed (distantly) by candidate understandings and requests for repetition. Similarly, Liebscher and Dailey-O'Cain found that candidate understandings, along with a category they refer to as 'request for definition, translation, or explanation' and classify as even more specific than candidate understandings (p. 379), were the most

commonly used type of repair initiation in their study on very advanced learners of German. In contrast, neither of these studies found any learner-issued non-specified repair initiations. This is particularly noteworthy as non-specified repair initiations are not only linguistically simple forms, but are also very similar in form in English and German.¹⁶

While a similar preference for specific types of repair initiations was observed in both studies, the explanations offered for this phenomenon differ. Egbert attributes the fact that she found only two instances of partial repeats with a question word (and none with only question words) primarily to incomplete usage of the L2 on the part of the learners, hypothesizing that these forms may not appear as frequently because they "require a combination of cognitive, linguistic, and interactive skills, for example, a fair amount of analysis of the trouble-source turn, the immediate retrieval of the appropriate interrogative, and, with inflected question words, linguistic knowledge about case, number, and gender" (p. 158). This, Egbert says, may be difficult for first-year students. Liebscher and Dailey-O'Cain, on the other hand, investigating highly advanced speakers of German, attribute the general lack of less specific types of repair initiation primarily to the classroom setting, in which their data were taken. They explain that students appear to want to avoid being suspected of not listening, given that the classroom role of students is that of attentive listeners. Thus, students may not have felt comfortable using forms of repair initiations that may be interpreted as being inconsistent with that role (p. 382). To explain the lack of non-specified repair initiations in her data, Egbert likewise suggests that the oral

interview setting in which her data were collected may have played a role, as students were specifically instructed on how to initiate repair (namely, by asking for repetition) as part of the interview. As a result, such forms appeared frequently, as did forms contained in the students' German textbook (which were forms not generally found in everyday native speaker conversation, e.g., 'Wiederholen Sie bitte', '*Repeat please*'), but the non-specified repair initiations (e.g., 'hm?' or 'was?') frequently found in native speakers of German did not, possible because they may have been deemed too informal for a testing situation.

Both studies thus suggest that the context in which data are taken may play a significant role. Specifically, many studies on the use of repair by NNSs have been conducted either in classroom settings or have investigated NS-NNS interaction. While these studies provide important information on the use of repair by learners, they all involve "unequal power speech exchange systems," defined as speech exchanges in which the members do not have equal rights to participate in the talk (Markee, 2000, p. 68). While it is not necessarily always true that there are unequal rights to participate in talk for NSs and NNSs (unlike in institutional settings, such as classrooms, where the right to turns-at-talk tends to be tightly regulated), speakers in such settings often (though not always) differ in their command of the language, which may pose restrictions on the NNS's turns-at-talk. In fact, in such speech exchanges, speakers often orient to the 'expert' status of the NS during the conversation (e.g., Brouwer, 2003), thus showing that the differing language expertise is in fact relevant. It is therefore often possible to speak of unequal power speech

exchange systems in such studies. In contrast, studies investigating the interactive behavior of NSs of a given language during talk-in-interaction tend to gather data in "equal power speech exchange systems," i.e., speech exchanges in which all members have equal rights to participate in the talk (Markee, 2000, p. 68). Thus, comparing results from studies involving different power speech exchange systems may be problematic. However, studies investigating only NNSs in equal power speech exchange systems are rare; therefore, results from the present study may not only differ from those found in different participation frameworks (e.g., Egbert, 1998; Liebscher & Dailey-O'Cain, 2003), but, given that data were collected in a comparable power speech exchange system, also make an important contribution towards explaining how language learners' repair behavior may differ from that of NSs and whether that may be related to language ability.

Apart from studies investigating repair initiation techniques in NNSs, which is a common research focus, other aspects of other-initiation of repair have also been investigated in NNSs. Specifically, Wong (2000) examined where, rather than how, NNS 'others' initiate repair. She found that while these NNSs generally initiate their other-initiated repair within next turn (as do NSs), they do so in a delayed fashion. More specifically, they generally first react to the trouble source by receiving it and only subsequently – after a short pause – initiate repair on it. Wong attributes this pattern to the fact that these NNSs may need more comprehension time in order to determine whether a turn has been understood or not, which she attributes to the NNSs' lower level of language competence. In essence, she shows how NNSs

process a (trouble source) turn twice, first simply by issuing a receipt, then by actually reacting to it.

In the following sections, I will present an analysis of trouble sources and other-initiations of repair as they appear in the data and relate my findings both to repair behavior previously established for NSs as well as NNSs (as discussed above). This will be particularly relevant in light of the equal power speech exchange system in which the data were collected, which not only allows for a comparison of the NNS repair behavior exhibited in the data to that of NSs, but also offers an opportunity for contrasting the results with those previously collected in NNSs in unequal power speech exchange systems.

3.3. Analysis

3.3.1. Trouble Sources

Overall, 116 other-initiations of repair in a total of 62 other-initiated repair sequences were found in the data. These other-initiations were first examined in respect to the type of problems in response to which they appear in the data in order to establish which types of troubles they are used to resolve. Overall, the trouble sources tended to fall into one of three categories: lexical trouble sources, content-related trouble sources, or sequential trouble sources. Table 1 shows the number of occurrences of each type of trouble source in the data.

Table 1.
Types of Trouble Sources and Number of Occurrences

Type of trouble source	Number of occurrences		
Lexical	31		
Content-related	50		
Sequential	19		
Ambiguous ¹⁷	16		

While Table 1 shows that content-related troubles, followed by lexical trouble, were *overall* the most frequently attended to type of trouble source, it will later be shown that the types of troubles treated vary considerably with group. First, however, some examples of the different types of trouble sources will be discussed.

3.3.1.1. Lexical Trouble Sources

For an example of a lexical trouble source, consider the following more detailed version (vis-à-vis the very simplified version on page 51) of excerpt (8). This is an excerpt from Group 1, who is in the process of discussing the various languages the group members are studying or will begin to study in the near future.

(8) [Esperanto, Group 1, simplified]

01	Richard:	<pre>.h du sollst esperanto lernen hehe .h you should esperanto learn hehe you should learn esperanto</pre>		
02		(.)		
03	→ Linda:	hm?		
04	Richard:	du- du sollst- auch esperanto lernen heh.hh you- you should- also esperanto learn heh you should also learn esperanto		
05	→ Linda:	esperanto,		
06	Richard:	<pre>.h ist die: (.) ääh internalh is the</pre>		

```
07
                 internaschion:alisch
                 internationalish
08
                 (0.4)
09
     Linda:
                 00 [ h
10
     Richard:
                    [mund heh
                    [mouth heh
                    language
11
                 mheh .h ja
     Linda:
                 mheh
```

At the beginning of this sequence, Richard advises Linda about which language she should study next (line 01). However, after a brief pause (which, in itself, could be a possible indicator for trouble), Linda issues a non-specified repair initiation ('hm?') in line 03. As these non-specified repair initiations generally target the entire previous utterance as problematic or are, due to their unspecific nature in terms of identifying the exact trouble source, understood as doing such, it is perhaps not surprising that Richard tries to resolve the problem by simply repeating his utterance (line 04), a typical response to a non-specified repair initiation. However, as evident in Linda's second repair initiation in line 05, her trouble is not resolved. Notably, Linda uses a partial repeat, and thus, a more specific repair initiation, here. Unlike her first repair initiation, this locates the specific trouble source: the word 'esperanto'. Having been made aware of the specific location of the trouble source, Richard now responds by issuing a different repair operation: He begins to explain the meaning of the word 'esperanto' (in lines 06, 07, and 10). This suggests that he now understands the trouble as being lexical in nature (i.e., that Linda does not know what the word 'esperanto' means or what it refers to). Linda's change-of-state token (Heritage, 1984)¹⁸ 'ooh' in line 09 and subsequent agreement 'yes' in line 11 indeed suggest that Richard's interpretation of the nature of the trouble source and thus his repair operation of explaining the meaning of the word was appropriate. With her agreement ('yes') in line 11, Linda refers back to Richard's original utterance in line 01, showing that she is now able to respond to it, thus indicating that his repair operation (which treated the trouble as being lexical) was successful and her trouble is resolved. Thus, it can be concluded that the nature of the trouble was indeed lexical. In all, 31 other-initiations of repair were found to treat such lexical trouble sources.

3.3.1.2. Content-related Trouble Sources

Most other-initiations (a total of 50) were found to treat content-related troubles, as illustrated in the following excerpt. When this sequence occurs, Group 3 is discussing the menu items available at an outing the previous evening.

(18) [Sauce, Group 3]

```
01
     Monica:
                 und die soße,
                 and the sauce
02
                 (0.3)
0.3
     Monica:
                 DAS schmeckt.
                 that tastes
                 that tasted good
                 die [soße? mit de[:r mit der [brot
04 \rightarrow Kacey:
                 the [sauce? with [the with th[e bread
05
     Clint:
                      [the s:auce w[as
06 \rightarrow Adam:
                                    [die:
                                                [weiße soße?
                                    [the
                                                [white sauce?
07
     Monica
                 ja, [die wei[ße soße
                 yes [the whi[te sauce
08
     Kacey:
                      [jaa das[ war gut
                      [yes tha[t was good
```

09 Adam: [ja [*yes*

Initially, Monica comments on a sauce the group had eaten (lines 01 and 03). In line 04, then, Kacey initiates repair on it. Her initiation begins with a partial repeat ('the sauce?'), thus locating the specific trouble source, and continues with a candidate understanding ('with the bread?'). While the partial repeat could also indicate a lexical trouble source (as in excerpt [8]), the candidate understanding that follows it immediately qualifies the partial repeat, suggesting that the problem may not be with the meaning of the word 'sauce', but rather that Kacey seeks to clarify which sauce Monica is talking about ('the sauce with the bread?'), as more than one type of sauce was possibly involved in the outing. Notably, Kacey does not pause to find out the meaning of the word 'sauce' after her initial partial repeat, but immediately continues talking; thus, she appears to have understood Monica's utterance lexically (i.e., there is no problem with the language used per se), but rather seeks to clarify an aspect of the utterance that is related to the information conveyed in its, i.e., its content. The same is true for Adam's repair initiation 'the white sauce?' in line 06, which is also a candidate understanding and targets the same trouble source. In his repair initiation, it is clear that he does not find the word 'sauce' troublesome, but rather seeks to determine which sauce is being talked about. When Monica subsequently attempts to resolve the problem in line 07 by agreeing with Adam and specifying the sauce in question ('yes, the white sauce'), she thus displays that she understands Adam and Kacey's repair initiations as being content-oriented (i.e., she does not define or explain the word, as Richard had done in excerpt (8), but rather agrees on Adam's

understanding of the trouble source). Subsequently, both Adam (line 09) and Kacey (line 08) are able to agree with Monica's original statement, thus showing that the trouble is resolved for them. The fact that the repair operation offered by Monica in line 07 is successful in resolving the trouble for Adam and Kacey suggests that the nature of the trouble source was indeed content-related.

3.3.1.3. Sequential Trouble Sources

Finally, the third type of trouble source in the data is sequential in nature (19 occurrences). Sequential troubles do not stem from problems with the language or the message contained in the language, but rather from aspects related to the sequence of turns. This includes, for example, overlapping speech or sudden changes of topic, but also hearing problems due to, for example, inattentiveness to a particular speaker's speech at a given time because attention is focused on a different speaker. Consider the following example, in which Group 3 is discussing an excursion to the beach planned for that night.

(19) [Beach, Group 3]

```
01
                mikes v- gastvater auch sagt dass er (0.2)
     Clint:
                mike's f- questfather also says that he
                mike's hostfather also says that he
02
                fahren (0.2) äh (.) auto fahren kann.
                             иh
                                    car drive can
                can drive, can drive a car
                [Clint lowers eye-gaze onto table
03
                [(1)
04
     Monica:
                0 [ k
0.5
     Sallv:
                 [wer is[:t, (.) gehen.
                 [who is[
                 [who is[ going?
```

```
06
                         [nach wo? (.) nach (.) wohin?
     Zack:
                         [to where?
                                    to
                    [Cl. lifts head and turns eye-gaze to Za.
07
                 (0.[3)
                [gaze to Sa.
08 → Adam:
                [viele, (0.2)
                                 Clint:
                                            hm?
                                            hm?
                [many
09
                I guess
                                 Zack:
                                          wo? (.) [hin?
                                           where? [to?
                quess
10
                                 Clint:
                                                    [ääh
                                                    [ uuh
11
                                            (I=an:) ich hhh
                                             I an
                                                    Ι
                                            (0.2) hab immer
12
                                                  have always
13
                                            vergessen den name
                                            forgotten the name
                                            (I always forget
                                            the name)
```

This sequence begins with Clint commenting on the group's transportation to the beach (in lines 01 and 02). While Monica simply acknowledges this statement in line 04 ('ok'), both Sally and Zack subsequently ask a question relating to it: Sally is inquiring about who will be going to the beach (line 05) and Zack is inquiring about where they are going (line 06). Sally begins her turn first, but Zack then begins his turn before she has finished it. It is not initially clear which question Clint attends to, as his eye-gaze is cast downward. However, during the pause following Zack's question, Clint lifts his head and turns his eye-gaze to Zack, thus showing that he is now attending to Zack's question. Instead of answering the question, however, he issues a non-specified repair initiation (line 08), thus indicating that there is a problem. As non-specified repair initiations in themselves do not specify a trouble source other than that it is located in (or *is*) the previous turn, it is not immediately

clear what the nature of his trouble is. However, there are two factors that offer an indication as to the nature of the trouble source: First, it is not clear whether Clint is listening to either question (i.e., he may not have heard it at all), and second, even if he is, the trouble source turn is produced in overlap with another turn (i.e., he may not have heard it completely or clearly). This may indicate that neither the language nor the content of the utterance may the problem, but rather the sequential environment in which it was produced (i.e., in overlap and/or addressed to an inattentive or distracted interactant). This interpretation is further supported by the continuation of the conversation: In line 09, Zack (partially) repeats his original question, thus doing the repair operation. As shown in Clint's next turn (lines 10-13), where he attempts to answer Zack's question, this repair operation (a mere repetition of the trouble source) effectively resolves the problem for him. Thus, after Zack (partially) repeats his question, there is no indication of any further language- or content-related problem for Clint, supporting the notion that the problem was indeed sequential in nature.

3.3.1.4. Discussion

As was mentioned previously, while content-related trouble sources appear to be most frequently targeted by other-initiation of repair *overall*, the types of troubles attended to in fact vary significantly with group. This distribution of trouble sources among the groups is presented in Table 2.

Table 2.

Types of Trouble Sources and Number of Occurrences

Type of trouble source	Group 1 ¹⁹	Group 2	Group 3
Lexical	10	21	0
Content-related	4	13	33
Sequential	5	4	10
Ambiguous	4	3	9

It can be seen here that while Table 1 indicates that content-related troubles are the most frequently treated type of trouble, this is in fact only the case in Group 3. In this group, almost two thirds (33 instances) of all other-initiations are designed to resolve a content-related problem. In both other groups, this preference to attend to content-related troubles is not evident. In fact, Group 2 only attends to content-related troubles in 13 instances (accounting for approximately one third of all occurrences), and Group 1 even does so in only 4 instances (in approximately one sixth of all occurrences). In both of those groups, on the other hand, the tendency to attend to lexical troubles is much stronger, accounting for about one half of all instances in both groups. In contrast, Group 3 does not appear to attend to lexical types of troubles with any frequency.

These observable preferences may suggest a stronger focus in Group 3 (the study abroad group) on content, with the resolution of problems in the conversation relating to its content being most important. Especially in comparison with Groups 1 and 2, this is significant. Groups 1 and 2 both focus primarily, though not exclusively, on language-related, namely lexical, problems. Thus, they are, to a large degree, concerned with resolving problems arising from and with the use of the

second language, i.e., problems that arise because a word or expression is not known or understood, ²⁰ which is in stark contrast to Group 3's focus on content. This is particularly interesting considering that NSs of English also overwhelmingly prefer higher-level global and discourse-related repairs to local repairs (Shonerd, 1994; see Note 1). It may be significant then that it is the students in the study abroad group, i.e., the students who have spent six weeks in an intensive study abroad environment and have thus likely had much more exposure to (and therefore, input in) the target language (which may, in turn, lead to stronger linguistic abilities in this group), that also exhibit a strong preference for such discourse-related, global repairs. This would suggest that their repair behavior may be more native-like. Similar results have, in fact, been previously reported, albeit primarily in connection with self-initiated repair (O'Connor, 1988; Salo-Lee, 1991; Shonerd, 1994): Lower-level learners' repairs appear to be predominantly local and language-focused, but as proficiency improves, repairs become more global and meaning-related. Thus, while lower-level learners may be more concerned with language-related (and predominantly lexical) problems, more advanced learners may become more concerned with improving the content of their utterances, possibly as a result of fewer of their linguistic resources (or less attention) being tied up in the production of language, thus allowing for an increased focus on content. This suggests that a higher level of language proficiency may lead to the appearance of more global, content-related repairs as opposed to local, language-related repair, but also that the increased appearance of such content-related repairs may in fact be evidence *of* higher proficiency. It is possible then that the organization of repair may in fact, at least in part, be related to language proficiency.

However, it should be emphasized at this point that this difference in focus does not necessarily imply that there are no or few lexis-related problems in Group 3. While it is *possible* that there are fewer lexical other-initiated repair sequences in this group because the group does indeed encounter fewer of these problems (which *may*, in turn, be a result of the environment in which they have spent the last several weeks) and, given the discussion above, this is indeed likely, it is also possible that the group encounters these kinds of problems as well, but does, for one reason or another, not attend to them (which may, in fact, be a *result* of their preference for content-related repair sequences). What can be said with certainty, however, based on the data presented here, is that while Groups 1 and 2 seek to primarily resolve language-related problems, Group 3 attends predominantly to content-related troubles, i.e., the members of that group appear to focus on resolving problems in the conversation that arise in relation to its content (i.e., its communicative message), rather than the language used to convey that content.

3.3.2. The Repair Initiation

All types of other-initiations that were introduced in section 3.1 as having been shown to appear in both native speakers of German and English occurred in the data; however, neither specifically 'German' repair initiations like *positioned* questions or 'wie:' plus addition, nor 'textbook' forms previously found in learners of

German (Egbert, 1998) have been found. However, another type of repair initiation occurred with great frequency: explicit questions. Therefore, this type of repair initiation was also included in the analysis. An example is provided below:

(11) [Lass uns, Group 2]

```
04
     TS
          Rachel:
                    lass- (.) [lass uns lesen lass uns (sitz-)
                             [let us read let us sit-
                    let-
05 → RI
          Daphne:
                              [was ist lass uns
                              [what is let us?
06
                    (...)
07
                    was bedeutet la[ss uns
   → RI Anne:
                    what does let u[s mean?
0.8
     RO
           Rachel:
                                   [let's
```

While this type of repair initiation is sometimes included in the category of partial repeats + question words (e.g., Egbert, 2000, pp. 142-143), I have decided to establish explicit questions as a separate category. In fact, not all explicit questions in the data actually contain a partial repeat (see, for example, excerpt (9) on pages 106-107, line 15), which excludes at least those repair initiations from the partial repeat + question word category. In addition, the two repair initiation formats also differ both syntactically, i.e., while in partial repeats + question words, the question words are post-positioned, in explicit questions, they are pre-positioned, and in their linguistic complexity, i.e., explicit questions often contain elements not previously uttered and thus require the production of independent language on the part of the learner, thus requiring more resources in the areas of syntax (i.e., word order) and morphology (e.g., verb forms). Compare the following two excerpts:

<u>Partial repeat + question word:</u>

(10) [Bean, Group 3]

```
01 TS Clint: oh. \underline{sean} bean.
02 (.)
03 \rightarrow RI Sally: sean (was)?
\underline{sean} what?
```

Explicit question:

(9) [Karl, Group 2, extremely shortened and simplified]

Although explicit questions ask about a very specific part of the trouble source, thus locating the trouble source very specifically, they do not attempt or display the repair-initiating speaker's understanding of the trouble source, as candidate understandings do. Thus, explicit questions are likely located between partial repeats and candidate understandings in terms of their level of specificity. For the types of repair initiations that appear in the data, this leads to the following order of specificity:

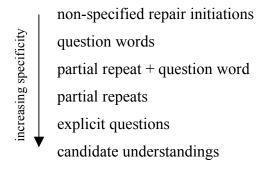


Table 3 lists the types of other-initiations that were found in the data in order of increasing specificities and indicates the overall frequencies (i.e., in all groups combined) with which they appeared.

Table 3.

Types of Other-Initiations of Repair and Number of Occurrences

Type of other-initiation	Number of occurrences		
Non-specified troubles	26		
Question words	6		
Question word + partial repeats	5		
Partial repeats	25		
Explicit questions	19		
Candidate understandings	35		

In the following, these types of repair initiations will be discussed and related to both the types of trouble sources they are used to resolve and the environments in which they occur.

3.3.2.1. Candidate Understandings

As can be observed in Table 3, candidate understandings were the most frequently used type of other initiation in the data. This preference for the most specific type of repair initiation is analogous to findings by Liebscher and Dailey-O'Cain (2003) discussed in section 3.2. An example of a candidate understanding in the data is presented below (see also excerpt (18) for another example). In this sequence, Group 2 is engaged in a discussion about a book the class had been reading, the main protagonist of which is called Tina.

(20) [Oma, Group 2]

```
01
                 wie rea[giert (.) was äh äh [denkt sie
     Meg:
                                    what uh uh [thinks she
                 how rea[cts
                 how rea[cts, what does she think?
02
     Steve:
                         [mhm
03
     Daphne:
                                               [denkt
                                               [thinks
04
                 (1.5)
05
     Daphne:
                 hm?=
06 \rightarrow Steve:
                 =was denkt sie über die tina ist (.) weg?
                 what thinks she about the Tina is gone?
                 what does she think about Tina being gone?
07
                 ja hah=
     Meq:
                 yes heh
08
                 =sie:
     Steve:
                 she
09
                 (.)
10
     Meg:
                 hah ha[ .h
11
     Steve:
                        [she doesn't care
12
                 jaa hahahahaha
     Meq:
                 yes hehehehehehe
```

The sequence begins with Meg asking Steve a question about the book that could be asked on a test about it (line 01). Steve, however, does not immediately respond to this question, which leads to a lengthy pause of 1.5 seconds (line 04) and a prompt by Daphne (line 05) for Steve to answer the question. In line 06, it becomes clear why Steve has not yet answered the question: He initiates repair on it, thus indicating that there is a problem for him. The form his repair initiation takes is that of a candidate understanding: He offers his own understanding of the trouble source (i.e., his understanding of what Meg meant). By phrasing his repair initiation in the way he does, he furthermore indicates that he did not have a lexical problem with what Meg

said ('was denkt sie'), as he is able to incorporate her utterance into his repair initiation. Rather, he appears to understand that Meg is asking him about what a particular character in the story thinks, but may be unsure about what aspect of that character's thoughts Meg is asking about. Thus, his problem is with the content of Meg's utterance (in this case because it was not specific enough), rather than for example its lexical meaning.

This association of candidate understandings with content-related trouble sources, as shown in excerpts (18) and (20), is very typical of the candidate understandings in the data. Overall, 30 of the 35 occurrences of candidate understandings in the data appear in response to a content-related trouble source. As was seen in section 3.3.1.4, however, preferences can vary in different groups. In fact, in Table 4 (below), it can be seen that candidate understandings are particularly prevalent only in Group 3 (accounting for almost one half of all other-initiations in that group) and less so in the other groups (where they only account for approximately one fifth of all occurrences). This is perhaps not surprising, as it is also Group 3 that primarily attends to content-related problems (as discussed in section 3.3.1.4). Thus, it is possible that the increased focus on content in this group may play a role in the prevalence of candidate understandings in the group.

Table 4.
Types of Other-Initiations of Repair and Number of Occurrences in Different Groups

Type of other-initiation	Group 1	Group 2	Group 3
Non-specified troubles	11	3	12
Question words	0	3	3
Question word + partial repeats	0	2	3
Partial repeats	6	11	8
Explicit questions	2	13	4
Candidate understandings	4	9	22

Of the remaining 5 instances of candidate understandings (all of which occur in Group 2), 2 appear in ambiguous sequences, where the trouble source cannot be clearly determined, with the remaining 3 instances appearing in response to lexical trouble sources. All three of these occurrences of candidate understandings with lexical trouble sources appear in a particular environment: multiples. Consider excerpt (21), where Meg is attempting to find out what the German word for a particular Russian word is.

(21) [Davai, Group 2, extremely simplified and shortened]

Meg:	uuh what means	um uh	in german uh
	davai? <i>davai</i>		
Daphne:	davai?		
Rachel:	davai?		
Daphne:	ist das <i>is that</i>	Meg:	eheh ja. auf yes in
	russisch? russian?		deutsch german
		Rachel:	n[ein n[o
	Daphne: Rachel:	<pre>uuh what means how do you say davai? davai Daphne: davai? Rachel: davai? Daphne: ist das is that russisch?</pre>	<pre>uuh what means um uh how do you say 'davai' in davai? davai Daphne: davai? Rachel: davai? Daphne: ist das is that russisch? russian?</pre> <pre>Meg:</pre>

```
08
     Daphne:
                 was ist das
                                  Meg:
                                              [ich hab-(.)]
                 what is that?
                                               [I
                                                    hav-
09
                                              nein,
                                              no?
10
                                  Rachel:
                                              hm mh
                                              huh uh
11
     Meg:
                 davai? em (.) es ist ähm (.) ää[h (.) hm
                                it is
                 davai? um
                                        uhm
                                                uu[h
                                                          hm
12 \rightarrow Daphne:
                                                   [russisch ja?
                                                   [russian yes?
13
                 ein russisch wor[t?
                     russian wor[d?
14
     Rachel:
                                  [lass un:s (.) etwas machen
                                  [let
                                         us
                                                something do
15
     Mea:
                 m hm (.) ja
                 uh huh
16
     Rachel:
                 davai auf russisch ist (.) lass uns auf
                 davai in russian is
                                              let
17
                 deutsch
                 german
18
                 (.)
19
     Daphne:
                 ooh
```

Here, Daphne first initiates repair on Meg's turn in line 03, using a partial repeat of the word in question ('davai') and thus identifying the trouble source. Rachel, however, to whom Meg had addressed her initial question, also initiates repair on the item in line 04; thus, Meg continues to focus her attention on Rachel, seeking to find out how to say 'davai' in German. Meanwhile, Daphne initiates repair on the item again, once with the question 'is that Russian?' and then by asking 'what is that?' (lines 05 and 06, and 08, respectively). This time, she uses explicit questions, i.e., more specific repair initiations, which, at the same time, show the nature of her problem: She inquires first whether 'davai' is a Russian word and then what it

means; thus, her problem appears to be lexical in nature. Initially, however, her questions remain ignored and it is not until Meg has determined that Rachel cannot help her find the word she is looking for that she now attends to Daphne's repair initiations in line 11. As apparent in her multiple pauses and non-lexical speech perturbations, however, Meg is experiencing problems with the repair operation, which is perhaps not surprising, given that she had just attempted to find out how to say the word in German herself. At this point (in lines 12 and 13), Daphne issues another repair initiation, a candidate understanding, i.e., the only more specific type of other-initiation still available. Following this final repair initiation, Rachel (line 14) finally attempts to resolve the problem by explaining the meaning of the word by using it in an example, which ultimately leads to Daphne's problem being resolved, as indicated by her change-of-state token in line 19. Daphne's repair initiation behavior here is analogous to that of native speakers, who have been shown to use progressively more specific other-initiations if a previous repair initiation does not lead to a resolution of the problem (as discussed in section 3.1). Thus, the candidate understanding in this particular excerpt does not treat a content-related trouble source, but rather appears to be selected because of its more specific character (in relation to partial repeats).

This serves to highlight an important point: While there appears to be a connection between a particular type of trouble source, i.e., content-related, and a particular type of other-initiation, i.e., candidate understandings, in the data, specific types of other-initiations can occur in various environments for various reasons.

While certain tendencies or trends are observable in this particular data set, other criteria for the use of specific other-initiations appear to apply as well (e.g., in multiples); thus, as Drew (1997) has pointed out, "there is no single, determinate relationship between a particular source or kind of trouble, and ... [the] form of repair initiation" (p. 96); rather, several criteria appear to operate simultaneously. For example, while a lexical type of trouble source may initially lead to the production of a partial repeat (as in the example above), other repair initiations may appear in lexically-oriented repair sequences as well, but often do so for particular reasons, such as a failure of previous repair initiations to resolve the trouble.

3.3.2.2. Non-specified Trouble

Along with partial repeats, non-specified repair initiations are the second most frequently occurring repair initiations in the data (see Table 3). This finding is in stark contrast to previous findings by Egbert (1998) and Liebscher & Dailey-O'Cain (2003), who found no non-specified repair initiations in their respective studies. However, in the data presented here, this type of repair initiation occurs 26 times in total, particularly in Groups 1 and 3 (where it accounts for almost one fourth of all occurrences in Group 3 and almost one half of occurrences in Group 1), although the environment occasioning these particular repair initiations may not be identical in both groups. Similar to what was observable for candidate understandings in the data, a large number of non-specified repair initiations appear in response to a particular type of trouble source: sequential trouble sources. It is, in fact, also in

Groups 1 and 3, that sequential trouble sources are more frequently attended to than in Group 2 (see Table 2). For an example, consider excerpt (22), in which Group 3 is trying to find the name of a beach they are planning to go to in the evening:

(22) [Selenstrand, Group 3, simplified]

```
[gaze to Nick
01
      Clint:
                  [ääh (I=I'm) [(.) ich[ hhh
                  [uuh I I'm
                                        [gaze to C [points finger at C.
02
     Monica:
                                        [oh sie [hab[en gesagt.=em
                                        [oh they[ ha[ve said
                                                      [gaze to Z
03
      Clint:
                                                      [>hab immer
                                                      [have always
                             [gaze to M
04
                  vergessen [den na[me<
      Clint:
                  forgotten [the na[me
                                     [gaze to C
05
     Monica:
                                     [see- (.) se[len,
                                     [see-
                                                se[len
                                                  [to Z
                                                           [gaze to C
06
      Clint:
                                                  [of the [strand.
                                                  [of the [beach
07
                  (1)
                                    [shakes head[waves hand & gaze to N
08
     Monica:
                  seensta[dt, (.) [or some- [egal.
                  seensta[dt
                                    [or some- [doesn't matter
                                               [gaze to C
09
     Nick:
                                               [selenstrand oder
                                               [selenstrand or
10
                  was,
                  what
11
                  (0.2)
                  [gaze to N
12
      Clint:
                  [oh ja [see- or s:
                  [oh yes[see- or s
                          [gaze to M
13
                          [du gehst?
     Kacey:
                          [you go?
```

[you're going?

14 →	Monica:	[to Z [to K [(dies-[) huh? [this- [huh?		
15		(.)		
16	Kacey:	<pre>du gehst? you go? you're going?</pre>	Clint:	was=was? what was?
17			Nick:	selenstran[d,
18	Monica:	hoffentlich hopefully	Clint:	[selen [selen
19		jaa <i>yes</i>		strand ja. strand yes

This sequence begins with an attempt by Clint to find the name of the beach (line 01). In lines 03, 04, and 06, he then continues to explain that he always forgets the name. In line 02, Monica enters the conversation and begins to attempt to find the name (line 05), as well. After a short pause in line 07, she continues her attempt in line 08, but abandons it shortly thereafter. At this point, Nick also enters the conversation (line 09) by offering a possible name. After a short pause, Clint utters a change-of-state token ('oh') followed by an acknowledgment ('yes'), thus indicating that he recognizes the name Nick has suggested (line 12) and appearing to accept that suggestion by attempting to reproduce it. It is in this situation that Kacey asks Monica (in line 13) whether she is going to the beach ('you are going?'). This is not only off-topic, but is also produced in overlap with Clint in line 12. At this point, however, Monica has already directed her attention to Zack (as indicated by her head movement) and in line 14 begins to say something to him, but then abruptly turns her head to attend to Kacey's question. Not only is she now attending to an utterance

produced on a different topic and in overlap, but also to one produced by someone other than the person she was previously attending to. This suggests that the non-specified repair initiation Monica utters next is in response to a sequential type of problem (rather than lexical or content-related). After a short pause, Kacey repairs this trouble by repeating her original utterance (line 16) and Monica – after another pause – then responds to Kacey's question (in lines 18 and 19) without any further lexical explanations or content-enhancing information necessary to enable her to do so. This suggests that Monica's trouble here was indeed of a sequential type and not lexical or content-related in nature. These types of sequentially problematic situations are where non-specified repair initiations most frequently appear in the data (another example was seen in excerpt [19]).

Overall, there are 17 occurrences of non-specified repair initiations (of a total of 26) that are deployed in response to a sequential trouble source. Of the remaining 9 non-specified repair initiations, 4 appear in response to a lexical trouble source and 5 are ambiguous sequences where the type of trouble source cannot clearly be determined. Although the latter 5 sequences were classified as ambiguous, they nevertheless have certain aspects in common. Consider excerpt (23) for an illustration of the type of environment in which these ambiguous non-specified repair initiations appear. In this sequence, Group 1 is engaged in a conversation about the TV show *Family Guy*.

(23) [Family Guy, Group 1]

```
01 Richard: .h family guy ist (.) ist gu(t) ist eeeh .h family guy is is good is uuuh
```

```
(blügen)? er (.) (mügen)?<sup>21</sup>
02
                    blügen
                               er
                                        mügen?
                   °(müll)°?
03
      Linda:
                    garbage?
04
      Alison:
                   [uhm
05
                   [(müll) jetzt
      Richard:
                    garbage now
06
                   (0.3)
07 \rightarrow Marc:
                   was?
                   what?
08
                   ehm [(.) tired heh
      Richard:
                   uhm [
                             tired heh
                        [che?<sup>22</sup>
09 \rightarrow Sam:
                        [what?
10
                   eheh[h.h
      Alison:
11
                        [müde?=
      Marc:
                        [tired?
12
      Richard:
                   =müde: [jetzt
                    tired [now
13
      Alison:
                            [jaaa
                            [yes
14
                   (.)
15
                   n[o.
      Linda:
16
                    [jaa
      Marc:
                     [yes
```

In line 01, Richard attempts to comment on the show, but encounters problems with the production of a specific word, as evident in multiple non-lexical items ('eeeh' and 'er') and pauses. He also try-marks²³ two different items, 'blügen' and 'mügen', in an attempt to produce the item. Thus, he is, at this point, engaged in a word search.²⁴ In line 03, Linda suggests the word 'müll', possibly also basing her suggestion on the sound of Richard's two previously suggested items. By using this item to complete his original utterance in line 05, Richard initially accepts this item, thus bringing the

word search activity to a possible end. At this point, however, there is a pause, as no one responds to Richard's utterance. This possibly suggests a continuing problem and in line 07, Marc does then, in fact, initiate repair with a non-specified repair initiation. Although Richard begins his repair operation turn in the next turn, Sam also initiates repair with another non-specified repair initiation (in line 09) before Richard can finish his repair operation. Richard's repair operation (line 08), a translation, in this environment likely functions as an attempt to solicit assistance. Thus, Marc subsequently supplies the item in line 11, which allows Richard to complete his original utterance in line 12. This is clearly a more comprehensible utterance to the conversation participants, as both Alison and Linda now offer their opinions about Richard's original utterance (begun in line 01), and in line 16, Marc (who initially initiated repair) also agrees, indicating that the problem is resolved for him.

It is in this kind of environment that the non-specified repair initiations previously classified as ambiguous generally appear: after the deployment of an already troublesome (for the trouble source turn speaker) item (which may or may not include an actual self-initiated other-repair sequence, as was the case here). While other-initiations generally serve to indicate to the trouble source turn speaker that there was a problem with his or her utterance, thus giving him or her an opportunity to self-repair this trouble, it is not always clear in these instances whether the other-initiation is deployed in order to indicate an incorrect or unsuitable word (which would imply that the speaker initiating the repair recognizes the item as incorrect or

unsuitable, or at least suspects that it might be), or whether it is deployed to indicate non-understanding (possibly due to the incorrect or unsuitable nature of the item) on the part of the person initiating the repair. In all instances in which this occurs in the data, however, an ultimately incorrect item was chosen by the trouble source turn speaker. While the other conversation participants may or may not be aware of this incorrectness (or unsuitability given the context) of the chosen item, they *are* likely aware of the troublesomeness of the item, as those tend to be marked as such by the trouble source turn speaker (with speech perturbations, pauses, and/or try-marking). It is possible, then, that these may also be instances of sequential problems, as the trouble for the receiver of the talk arises due to evident trouble in (rather than with) the trouble source turn speaker's talk, which at best disrupts the conversation flow and at worst makes the turn incomprehensible.

The third environment in which non-specified repair initiations appear in the data is in multiples (an example was given in excerpt [8]) targeting lexical trouble sources (all are found in Groups 1 and 2). In this environment, the non-specified repair initiation either appears as an initial repair initiation later followed by a more specific repair initiation (see excerpt (8) for an example), or as a final repair initiation after the trouble source has already been specifically identified, but the repair operation was nevertheless unsuccessful. For an example of the latter case, consider excerpt (24), where Alison and Linda are talking about how Alison occupied herself during a period of illness she has just returned from.

(24) [Lesen, Group 1]

```
Alison:
                  fernsehen, (.) oprah,
                  watch TV
                                  oprah
02
                  (.)
                  HAHAHA .mh ahahaha .h
     Linda:
03
                  (0.4)
04
05
     Linda:
                  [mit (.) george clooney?
                         george clooney?
                  [with
06
     Marc:
                  [hast du:
                  [have you
07
                  (.)
08
     Alison:
                  ts nei[n
                  ts no [
09
     Linda:
                         [oh
10
     Marc:
                  hast du [gelesen?
                  have you[read?
11
     Linda:
                           [that's the one my roomma[te was
12 \rightarrow Alison:
                                                       [hmmm?
     Linda:
13
                  watching
14
                  hast du gelesen?
     Marc:
                  have you read?
15
                  (1)
16 \rightarrow Alison:
                  gelese[n?
                  read [
17
     Linda:
                         [gelesen emm
                         [read
                                  um
18
                  (0.2)
19 \rightarrow Alison:
                  (I don't kn[ow)
20
     Linda:
                              [lesen
                              [to read
21
     Marc:
                              [lesen
                              [to read
22
     Alison:
                  oh JA JA ich äh (0.7) ich lese (.) zwei
                  oh yes yes I uh
                                          I
                                               read
23
                 büche(nt)
                  books
```

In line 01, Alison says that she was watching TV, specifically the TV show *Oprah*, while she was ill. Linda initially laughs about this (line 03) and then asks a follow-up question 'with George Clooney?' (in line 05). At the same time, Marc also begins to ask a question (line 06), which he, however, aborts, presumably to leave the floor to Linda in order for her to complete her question (line 05). Alison answers Linda's question in the non-affirmative (line 08), at which time Linda initially offers the change-of-state token 'oh' (line 09). At this transition-relevance-place, not only Linda's turn, but also the discussion about the TV show *Oprah* could theoretically be complete. Accordingly, Marc now takes the floor to ask his original question 'hast du gelesen?' again in line 10. Before he can complete his turn, however, Linda continues her topic strand (line 11), in which she explains her previous question about George Clooney, in final overlap with Marc. Both the new topic as well as the final overlap on the critical word in Marc's utterance ('gelesen') would indicate a sequential type of problem here. Thus, Alison initiates repair on Marc's question with a non-specified repair initiator 'hm?' (in line 12). As is typical for responses to non-specified repair initiations, Marc then repeats his question. This, however, initially produces a long pause (line 15), already indicating that there may still be a problem, followed by a second repair initiation by Alison in line 16. This second repair initiation, a partial repeat, is more specific than the first non-specified repair initiation and clearly identifies her trouble source (the word 'gelesen'). This implies that while her initial trouble may indeed have been sequential, she is now (or still, as it is possible that this was the nature of the problem from the beginning) having a

lexical (specifically, morphological) problem. In line 17, Linda initially tries to resolve the trouble by repeating the word, but the 'emm' following her repetition may also be an indication that her turn may not be complete; possibly, she is considering other types of repair operations and is simply attempting to hold the floor until ready to do so. However, a pause now ensues; Linda does not continue her turn and Alison still does not indicate understanding, suggesting that Alison's problem remains. She indicates this clearly when she says 'I don't know' in line 19. Here, instead of using a more specific repair initiation, Alison reverts back to a non-specified type of repair initiation: While her 'I don't know' clearly shows that there is a problem, it does not indicate in any way what or where her problem is. Neither is this, however, necessary in this case, as the specific trouble source has already been identified, albeit not successfully resolved. While it is possible that Alison uses a second non-specified repair initiation at this point because the trouble source has already been located, there may also be another explanation. According to the tendency of speakers to use successively more specific repair initiations in multiples, the most likely repair initiation following a partial repeat would be a candidate understanding. Candidate understandings, however, frequently imply some kind of understanding of the trouble source, as they constitute a possible understanding of it. This, however, appears not to be the case here; Alison appears to have gotten as specific as was possible for her and may not be able to offer a possible understanding of 'gelesen.' Thus, it is conceivable that instead of repeating her partial repeat repair initiation, she is trying to indicate that she does not understand at all what the word means by saying so. It is

possible that this may, in this instance, even lead to a more efficient resolution of the problem. Subsequently, both Linda and Marc supply the infinitive form of *gelesen*, i.e., *lesen* ('to read'), which finally resolves Alison's problem (as indicated by her change-of-stake token in line 22) and enables her to answer Marc's initial question.

Overall, the tendency of non-specified repair initiations to appear in multiples or in response to already troublesome items is predominantly observable in Group 1. This can perhaps help explain why this type of repair initiation is particularly common in Group 1 (accounting for almost one half of all other-initiations in this group): In this group, these repair initiations are not only used to attend to sequential types of problems, but also to other types of problems, which becomes particularly evident in multiples. Considering that Group 1 is the group that has had the least exposure to the German language (two semesters), they may choose these repair initiations for a different reason; i.e., their selection principle may be different. Instead of selecting a specific type of repair initiation to target a specific type of problem, they may choose these non-specific repair initiations primarily for their structural simplicity and the fact that they do not require any analysis or understanding of the trouble source turn previous to their deployment.

However, in light of Svennevig's (2008) research (see section 3.1), another factor may also play a role in this preference for non-specified repair initiations in Group 1. Specifically, Svennevig suggested that interactants may prefer to indicate troubles in hearing (which are often sequential problems) before they indicate a (more serious) trouble with understanding; in other words, "admitting a failure to understand

may display a lack of competence of some sort (vocabulary, ...), and thus be done less willingly than asserting that one did not hear" (Sacks, 1992, as cited in Svennevig, 2008, p. 335). Thus, it is possible that Group 1 may be particularly sensitive in this respect, possibly because they have had the least amount of exposure to and experience with the language and are thus possibly operating on a lower level of language ability (however, problems of understanding may in fact be quite prevalent). This may lead them to use more non-specified repair initiations even with lexical troubles, thereby implying a problem with hearing or a sequential type of problem, rather than using a – more appropriate – partial repeat (which is similarly linguistically non-complex) that may, however, imply non-understanding on their part.

3.3.2.3. Partial Repeats

As was the case in Egbert's study (1998) on other-initiated repair in first-year students of German, partial repeats were also very common in the data (25 occurrences). For an example, consider the following excerpt,²⁶ in which Group 2 is engaged in a conversation about a book they have previously read as a class.

(25) [Book, Group 2]

```
05
      Daphne:
                     [ja
                     [yes
06
      Anne:
                  jа
                  yes
07
      Lacy:
                  [(ja)
                  [ (yes)
08
                  [un[d deprimiert
      Rachel:
                  [an[d depressed
09
      Meg:
                      [ja
                      [yes
10
      Lacy:
                   [mmhm
                   [mmhm
11 \rightarrow Daphne:
                  [deprimiert?
                  [depressed?
12
                  [it's depres[sing heh
      Rachel:
13
      Lacy:
                  [mhm
                  [ mhm
                                [
14
      Daphne:
                                [oooh (.) ja
                                [oooh yes
```

In line 01, Rachel first makes a statement about the book and seeks agreement from the other group members. In the following lines, Steve, Daphne, and Anne all subsequently do, in fact, agree with her statement; hence, Rachel continues her utterance in line 08, during which both Meg and Lacy also voice their agreement with her original statement (lines 07 and 09). Daphne, however, now initiates repair on it by issuing a partial repeat (line 11). This type of repair initiation immediately locates the specific trouble source (the word 'deprimiert') and leads Rachel to repair the problem with a translation of the word into English. This suggests that she understands the trouble to be lexical in nature, i.e., a problem with the meaning of the word 'deprimiert'. Daphne subsequently (line 14) displays her understanding of the word by uttering a change-of-state token 'oooh', followed by agreement on Rachel's

original statement ('yes'). It appears that Rachel has understood the type of trouble correctly (lexical trouble), as the problem is now resolved for Daphne, enabling her to comment on the utterance. This example represents a typical instance of partial repeats in the data, with partial repeats frequently targeting such lexical problems (15 of the 25 instances of partial repeats appear in response to lexical types of problems). This is particularly evident in Groups 1 and 2, where almost all partial repeats (with the exceptions of one in each group) target such lexical trouble sources. This is particularly interesting as these are also the two groups who attend predominantly to lexical problems (approximately half of all other initiations in those groups treat lexical trouble sources).

In Group 3, which accounts for almost all remaining instances of partial repeats, this association is less clearly evident, however. In this group, a majority of the partial repeats are deployed in response to a trouble source that was in English, i.e., the native language of all study participants. In all of those instances, the trouble source is a proper name, either a name of a person or a name of a movie. This makes it somewhat unlikely that the source of the problem is lexical in nature and suggests that a different selection mechanism for the appropriate type of other-initiation may be at work. Consider the following two excerpts.

(26) [Clerks, Group 3, simplified]

```
01 Kacey: nein äh alt- alterer (.) film.

no uh old- older film

02 Zack: cler[ks zwe[i?
cler[ks two[?]]

03 Clint: [oooh. [j[a?
[oh [y[es?]]]
```

```
04
     Kacey:
                              [ja
                              [yes
05
                 (1)
06
     Zack:
                 clerks? (.) clerks?
07
                 (2)
08 \rightarrow Clint:
                clerks?
09
     Zack:
                [clerks zwei (.) kommt
                [clerks two
                                comes
10
     Monica:
                [clerk-
11
     Clint:
                aa[h
12
     Monica:
                   [n:a:h (das: wird) [(.) [SCHLECHT sei:n.
                   [n:u:h (that will) [ [bad
                                                 be
                   [that will be bad
     Clint:
13
                                      [ich habe problem(e) mit
                                      [I have problem(s) with
14
                der erste clerk[s.
                 the first clerk[s
```

In this excerpt, Group 3 is engaged in a conversation about new movies set to come out soon. Zack's utterance in line 02 is a contribution to this discussion: He mentions a movie title. When there is no response, he mentions it again in line 06. After a long pause, Clint now initiates repair on the item by issuing a partial repeat in line 08. This prompts Zack to repair the trouble by repeating the title in line 09 and mentioning specifically that it is coming out. This appears to resolve the trouble for Clint, as he subsequently issues a change-of-state token 'aah' in line 11, followed soon after (in lines 13 and 14) by a comment about a related movie. While it is not entirely clear what Clint's problem here is, it appears most likely to be sequential in nature, as Clint (line 03) was responding to a statement Kacey had made in line 01 at the time Zack issued the trouble source turn (line 02). This environment suggests that Clint may have missed Zack's initial utterance and thus, as his conversation with

Kacey comes to an end at this point, now seeks to gain entrance into the conversation in which Zack is involved by issuing a partial repeat. This is an interactional phenomenon previously described by Egbert (1997), who showed that other-initiations of repair can function as such entry (or exit) devices in multi-party conversations.

In the following excerpt, the partial repeat is neither in response to a lexical problem, nor a sequential problem, but rather occurs with what appears to be a content-related problem.

(27) [Daylight, Group 3, simplified]

```
01
     Nick:
                =daylight
02
     Monica:
              deep impact impa[ct
03 \rightarrow Clint:
                                [dayligh[t?
0.4
     Nick:
                                        [morgan freeman?=
05
     Monica: =ääh (was noch).
                uuh what else
06
     Clint:
               jaa. jaja ja.
                yes yesyes yes
07
                (0.4)
08
     Clint:
                es war besser (.) als (1.4) armageddon.
                it was better than
                                          Armageddon.
```

At the point where this sequence takes place, the group is still discussing movies, but is now talking about 'end of the world' movies. In line 01, Nick mentions the film *Daylight*. Clint initiates repair on this item in line 03 with a partial repeat. As the movie title is in English and Clint is able to repeat it, it is unlikely that he does not lexically understand the word. Rather, it appears that he understands the word and is likely able to infer, given the topic of the ongoing conversation, that it is a movie title.

He may, however, not know the movie or not be able to recall it at this point. His type of trouble would then be content-related. The following turns in the sequence support this analysis: Nick attempts to repair the trouble by mentioning an actor in the film (line 04). This seems to give Clint the information needed to resolve the trouble: He first issues a series of acknowledgment tokens in line 06 ('jaa. jaja ja.'), followed by a comment on the movie (line 08).

In both examples discussed above, the trouble sources are English proper names (in these cases of movies), making it doubtful that the actual problem is lexical in nature. Instead, it was shown that the types of trouble sources in these sequences vary; both an example of a sequential interactional (entry) device and a content-related trouble source were discussed. It is possible that these instances are evidence of a selection principle of other-initiation techniques frequently found in both English and German native speakers: The selection of a repair initiation most appropriate to the level of specificity needed (see discussion in section 3.1) to resolve the problem, rather than to the type of trouble source, as seems to frequently be the case in the data presented here. This may not be surprising, given that the trouble sources, and thus — as they are partial repeats of the trouble source — the repair initiations as well, are in English, i.e., the native language of all study participants.

3.3.2.4. Questions

Questions, a type of repair initiation not frequently documented in native speaker speech (see sections 3.1 and 3.3.2 for details), are also frequently occurring in

the data (19 instances).²⁷ Sequentially, they are most frequently found in multiples; i.e., they do not often appear by themselves. Consider the following example (this is another extension of excerpt (11) that was already partially presented on page 76), where Group 2 is attempting to find the meaning of a particular expression.

(11) [Lass uns, Group 2, simplified]

```
01
     Rachel:
                lass un:s (.) etwas machen
                 let us something do
                 let us do something
02 \rightarrow Daphne:
                [lass uns?
                 [let us?
03
     Meq:
                [m hm (.) [ja
                [m hm
                           [yes
04
     Rachel:
                           [lass- (.) [lass uns lesen lass uns
                                     [let us read let us
05 \rightarrow Daphne:
                                       [was ist lass uns
                                       [what is let us?
06
     Rachel:
               (si[tz-)
                 si[t-
07
                   [ja, ja, lass uns
     Meg:
                   [yes yes let us
08
     Rachel:
               jа
                yes
09 \rightarrow Anne:
                was bedeutet la[ss uns
                 what means le[ us
                 what does let u[s mean?
10
     Rachel:
                                 [let's
```

It is Rachel's utterance in line 01 that contains the troublesome expression 'lass uns'. Daphne first initiates repair on it in line 02 with a partial repeat ('lass uns?'). While this could indicate a lexical trouble source, the type of trouble source cannot clearly be determined at this point. Rachel, however, appears to treat it as such (i.e., lexical), as she then attempts to repair the trouble (in lines 04 and 06) by explaining the

troublesome item by using it in an example. Before she can finish this repair operation, however, Daphne issues a second repair initiation, this time in the form of a question (line 05). This question is more specific than the partial repeat in that it not only locates the trouble source, but also demonstrates the nature of the trouble: When Daphne asks "What is *lass uns*?", it is now clear that her problem is lexical in nature. While Meg agrees with Rachel's example in line 07, thus indicating that she appears to know the meaning of 'lass uns' as well (and effectively ignoring Daphne's repair initiation for the time being), it becomes apparent in line 09 that Anne also does not know the lexical item 'lass uns' when she initiates repair on it with another question. In line 10, then, Rachel finally resolves the trouble by translating the item into English. This is very typical of instances in the data in which there are questions that treat lexical problems – they tend to appear as more specific repair initiations after another repair initiation (generally a partial repeat) has already been deployed, either very briefly beforehand or unsuccessfully so. Thus, questions in these instances appear to serve to specify the trouble source (and its nature) more closely.

Similarly, content-related questions also often appear in conjunction with another repair initiation, namely candidate understandings, which, however, tend to *follow* the question. Consider excerpt (28):

(28) [Zwinger, Group 3]

```
01 Monica: =em (.) ts zwinger in dresden, (0.4) ist (1)

um ts zwinger in dresden is

the Zwinger in Dresden is

02 ganz (schön).

quite beautiful

very beautiful
```

```
(die) frauenkirche (in dre[sden)
03
     Clint:
                      frauenkirche in Dre[sden
04
     Monica:
                                             [besonders
                                             [especially
05
                 [(interes[sant)
                   interes[ting
06 \rightarrow Adam:
                 [was ist [der zwinger
                 [what is [the Zwinger?
                           [die frauenkirche in münchen,
07
     Kacey:
                           [the frauenkirche in Munich
08
                 (0.2)
09
     Monica:
                 ää[äh
                 uu[uh
10 \rightarrow Adam:
                   [WAS IST DER ZWINGER.=ein museum? oder [ein:
                   [what is the Zwinger? a
                                             museum or
                                                              [ a
11
     Monica:
                                                             [ähm
                                                             [uhm
12
                 ein festplatz mit garten un:d (0.2) em
                 a fairground with garden and
```

In this sequence, the group is talking about attractions in various cities in Germany that they would like to visit. Monica begins this sequence with mentioning the *Zwinger*²⁸ in Dresden (lines 01 and 02), which is followed by Clint mentioning the *Frauenkirche*²⁹ in Dresden (line 03). At this point, however, it becomes apparent that Adam has a problem with an aspect of Monica's utterance and thus issues a repair initiation on it in the form of a question (line 06). This not only locates the trouble source but also effectively indicates the nature of the trouble. He understands the word 'zwinger' phonetically (he can reproduce it) and he, given the general topic of the ongoing conversation, likely knows that it is a sight in Dresden, but he does not appear to know what the *Zwinger* actually is. So he asks 'What is the *Zwinger*?' At roughly the same time, however, Kacey continues the conversation by mentioning the

sight she would like to see: the *Frauenkirche* in Munich (line 07). Monica subsequently appears to want to continue this topic strand, as indicated by her non-lexical utterance 'äääh' (line 09). At this point, however, Adam issues his repair initiation again, but this time considerably louder (line 10). He also follows it immediately by an even more specific repair initiation, a candidate understanding ('ein museum?'), thus offering an understanding of what the *Zwinger* might be. This clearly indicates that, as previously stated, Adam has a basic understanding of what it is (a sight in Dresden), but does not know which one it is specifically. This suggests that his problem is indeed content-related. Monica's subsequent repair operation of explaining what the *Zwinger* is shows that she also understands it to be such.

These observations regarding the sequential placement of such questions in repair sequences reinforce the suggestion that questions are likely located between partial repeats and candidate understandings in terms of their level of specificity (following partial repeats and preceding candidate understandings). They play a role predominantly in Group 2 (where they account for approximately one third of all other-initiations), although all groups use them as a means of initiating repair. While it is not clear why Group 2 uses them more extensively than the other groups, it can be said, however, that while they (i.e., Group 2) use explicit questions approximately equally as frequently to target lexical as content-related trouble sources, it may help explain why they, despite issuing proportionally equally as many (or few) candidate understandings as Group 1, nevertheless attend to almost twice as many content-related repair sequences (which may be evidence of a stronger focus on content).

While Group 2 does not use candidate understandings more frequently than Group 1 does, they nevertheless exhibit a stronger focus on content and their use of questions may help explain this discrepancy.

3.3.2.5. Question Words and Partial Repeats with Question Words

The remaining two types of repair initiations, namely those including question words (i.e., question words and question words + partial repeats), are very rare in some and non-existent in other groups. In Group 1, neither of these two types of repair initiations appear at all. This is consistent with Egbert's (1998) finding on lower-level (first-year) learners of German. In Group 2, there are three occurrences of question words and two occurrences of a question word with a partial repeat. In Group 3, both types of other-initiation appear 3 times each. While this may indicate that some groups use a wider range of repair initiation techniques, these numbers overall are very low, and it is possible that the reasons for this suggested by Egbert (see section 3.2) may indeed be a factor. It may also indicate, however, that a longer exposure to and interaction with the target language may ultimately lead to a diversification of repair initiation techniques available to learners, both in a traditional classroom setting (i.e., in Group 2) as well as in a study abroad program (i.e., in Group 3).

While not all question word repair initiations can clearly be attributed to a specific type of trouble source, it can be said that they do not generally tend to appear

in response to lexical types of trouble sources, but rather are deployed in response to sequential or content-related troubles:

(9) [Karl, Group 2]

```
01
     Rachel:
                 ich denke dass karl, (0.2) ist wie eddie
                      think that Karl
                                              is like Eddie
02
                 izzard=
                 Izzard
03
     Lacy:
                 =ehehe[he
04
                        [eh[ehehe[he
     Meg:
05 \rightarrow \text{Steve}:
                           [wer? [wer?
                            who? [who?
06
     Lacy:
                                  [ehehe[he (.) [(cough)hehe
07
     Daphne:
                                        [wer ist[
                                        [who is [
08
     Rachel:
                                                 [(ka::r[l)
09
     Steve:
                                                        [karl
                                                        [karl
10
                 is[t ist
                 is[ is
                   [>wer ist-< wer ist-=
11
     Daphne:
                    [ who is
                               who is
12
     Rachel:
                 =wie: eddie izza[r[d[.
                  like eddie izza[r[d[
13
                                   [>[e[ddie izzard<</pre>
     Lacy:
14
                                     [w[er ist eddie izzard
     Anne:
                                     [w[ho is eddie izzard
15
     Daphne:
                                       [wer ist er
                                       [who is he
16
                 .h er ist-=
     Daphne:
                    he is
17
     Rachel:
                 =he's like, (.) (°karl°) (.) (ein bisschen),
                  he's like
                                     karl
                                                 a little
18
                 (.) I think, a little bit
                 ein musician?
19
      Daphne:
                     musician?
```

```
20
    Lacy: .h [(.) nein ähm
                 Γ
                     no
                         uhm
    Rachel:
21
               [no er ist em (.) kom[- komisch
                 [no he is um fun[- funny
22
    Lacy:
                                    [k- komi- komisch
                                    [f-fun-funny
23
              komisch ja
              funny yes
```

In line 01 of this excerpt (which is a more detailed version of excerpt [9]), Rachel likens the group's teacher Karl to a comedian called Eddie Izzard, which prompts laughter from Lacy and Meg, and a repair initiation in the form of a question word ('who?') from Steve (in line 05). Notably, Steve chooses the question word 'who?' as opposed to 'what?'. This shows that he has already analyzed the trouble source to some degree, as he is aware of the fact that he is asking about a person, rather than a thing, i.e., he understood enough of the trouble source to select an appropriate question word. This supports Egbert's (1998) suggestion that question words may be rare for this very reason: They require a certain amount of analysis of the trouble source turn before they can be used. This apparent analysis of the trouble source in this case shows that the trouble source is likely not lexical in nature: Steve is asking about a name, not an unknown word. Rachel initially treats the trouble as being sequential in nature, with 'karl' being the trouble source; hence, she simply repeats the name in her initial repair operation in line 08. However, Steve then issues another, more specific, repair initiation in lines 09 and 10, showing not only that Rachel's repair operation did not resolve his trouble, but also locating the trouble source specifically. Rachel now appears to understand that 'eddie izzard', the *other*

person involved in her original utterance, is the actually trouble source and completes Steve's partial repeat of her original utterance by supplying that name in line 12. It is not immediately clear whether this resolves Steve's problem or not, but both Anne and Daphne now issue even more specific repair initiations (explicit question), clearly indicating that their problem is with the identity of Eddie Izzard, rather than simply not having heard the name: They do not know who he is. This shows that the trouble here is actually content-related: The name was sequentially heard and lexically understood, but it is not clear whom it belongs to. Rachel, however, still does not address this trouble in her repair operation; she now translates her original utterance into English (lines 17 and 18). It is only after yet another repair initiation (line 19) in the form of a candidate understanding (the most specific type available) that Rachel is able to issue a repair operation appropriate to the type of trouble: an explanation of who this person is (line 21).

Almost all occurrences of question words plus a partial repeat show the same tendency to be either content-related or sequential in nature. This is probably due to the fact that they involve question words, which demand a certain amount of analysis (and understanding) of the trouble source before they can be used. It should be noted, however, that almost all question words in question word plus partial repeat repair sequences are 'what' or 'was', as is the case in excerpt (29):

(29) [Literatur, Group 2, simplified]

```
01 Rachel: es war (.) nicht literatur eh hehe it was not literature eh hehe
02 Daphne: (>nicht was?<)
not what?
```

This may show that even when this kind of repair initiation appears, it does not involve the kind of linguistic complexity or variety possibly seen in native speakers, who draw on the wealth of question words offered by their language; rather, the learners stay in a relatively small comfort zone of the cognates 'was' or 'what' that can also function as non-specified repair initiations and are very simple and non-complex in form.

3.4. Summary and Discussion

In the preceding discussion of types of repair initiations in the data, it has been shown that the frequently used types of other-initiations vary considerably with group. Group 1, for example, uses predominantly non-specified repair initiations (accounting for almost half of their other-initiations), followed by partial repeats. It was hypothesized that the large number of non-specified repair initiations in this group may largely be due to their relative structural simplicity, which may, in turn, be related to the lower level of language ability of those students. This would also help explain why partial repeats are the second most commonly used type of repair initiation in this group: They are also relatively structurally simple, while, at the same time, allowing the person initiating the repair to specifically locate the trouble source, which non-specified repair initiations do not do. Group 2, on the other hand, shows a very different distribution of repair initiations they frequently use. They predominantly use explicit questions (accounting for almost one third of all their other-initiations), but also frequently use partial repeats and candidate understandings

(each accounting for approximately one fourth of all other-initiations in this group). In Group 3, the distribution is again very different. They primarily use candidate understandings to initiate repair (in almost one half of all other-initiations), but also a relatively large number of non-specified repair initiations (accounting for approximately one fourth of their other-initiations). Thus, with increasing institutional seat time or intensity of exposure to or interaction with the language (and a possibly higher level of language ability), there appears to be an overall shift among the groups: Group 1 uses largely non-specified repair initiations, the least specific but also the least structurally complex type of repair initiation. While Group 2 also uses some less complex types of repair initiation (such as partial repeats), they overall tend to select more complex repair initiations: Both explicit questions and candidate understandings require the formulation of new and independent language, and any type of repair initiation involving a question word requires a certain amount of analysis of the language already used. This group also clearly favors repair initiations that are more specific in locating the trouble source: partial repeats, explicit questions, and candidate understandings. This latter trend is also observable in Group 3, who strongly favor candidate understandings, which are both linguistically complex and (the most) specific in locating the repair initiation. Thus, groups which have more or longer exposure to the target language favor more structurally complex, but also more specific repair initiations. This may indicate that along with more complex language, learners with longer or more intense exposure to the target language may also be better able to analyze the previously deployed language (as is

necessary for both question words as well as candidate understandings to be used), both of which would indeed suggest a higher level of language ability in these learners.

Especially vis-à-vis previous findings on other-initiation techniques used by NNSs of German (as discussed in section 3.2), these findings support the suggestion that context may play an important role in the appearance of specific repair initiation techniques. Specifically, while both Egbert (1998) and Liebscher and Dailey-O'Cain (2003) reported finding no non-specified repair initiations (or at least none that appear in NSs), these were not at all rare in this data. While I have argued above that the frequent appearance of non-specified repair initiations in Group 1 may be related to their relatively low level of language ability and the relative linguistic simplicity of most non-specified repair initiations, in Group 3, it may be related to the focus on context and discourse-related problems evident in that group. Namely, non-specified repair initiations most often appear with hearing or other types of sequential problems and sequential problems tend to be global and discourse-related rather than local or language-related by nature, as they tend to address problems that stem from problems related to the sequential context of the utterance (either internal to or external of the utterance per se), rather than its linguistic features. While the reason for a certain preference for non-specified repair initiations in different groups may thus differ, there are no indications in the data that non-specified repair initiations may in any way be dispreferred. This supports the suggestion put forth in section 3.2 that it may be the data collection setting in both Egbert's (1998), i.e., an oral interview testing

situation, as well as Liebscher and Dailey-O'Cain's (2003) study, i.e., a classroom instruction setting, that prevented students from using non-specified repair initiations. In other words, both settings may impose restrictions on students' use of non-specified repair initiations, in the first case because they may be deemed too informal for a testing environment and in the second case because they may not appear to be reconcilable with the students' classroom role of attentive listener (see section 3.2 for more discussion on this topic). No such restrictions appear to apply in the present study, as students in fact frequently used non-specified repair initiations. Thus, the equal power speech exchange system in which the data for the project were collected may indeed significantly influence the appearance of certain repair initiation techniques. As students in the data freely use non-specified repair initiations and this is analogous to NS behavior, this supports the notion discussed in chapter 2 that the data collection setting in this study in fact closely resembles naturally-occurring interaction.

In addition to an analysis of the types of repair initiations that occur in the data, they were also analyzed in relation to the type of trouble they are used to treat. While it was already discussed in section 3.3.1 that Groups 1 and 2 tend to seek to resolve primarily language-related (i.e., lexical) troubles, while Group 3 tends to seek to resolve content-related troubles, section 3.3.2 also serves to illuminate the relationship between specific types of troubles and specific types of other-initiations. It was shown that groups displayed a tendency to use partial repeats to attend to lexical troubles, candidate understandings to attend to content-related troubles, and

non-specified repair initiations to attend to sequential types of troubles. While questions regularly appeared both with lexical as well as content-related trouble sources, how they were utilized by the different groups showed a particular distribution. Group 1, for example, only used questions to target lexical types of troubles, while Group 3 only used them to target content-related types of problems. In both cases, this may be a further result of the lexical focus in Group 1 and the content-related focus in Group 3. Group 2, on the other hand, used questions approximately equally as frequently to address lexical as content-related problems, which reflects the lexically focused, but also somewhat content-related, orientation of this group, or vice versa.

The association between candidate understandings and content-related trouble sources was particularly notable in Group 3, which showed a particularly large number of candidate understandings, all of which were used to resolve content-related problems. It is not clear at this point whether it is the increased focus on content (rather than language) in this group that leads to a larger number of candidate understandings (based on their tendency to be used in connection with content-related problems) or whether it is an increased ability to use the linguistically more complex candidate understandings that also leads to an increased ability to focus on content, rather than language. Clearly, however, there appears to be a connection between these two findings in this group, the focus on content on the one hand and the increased use of candidate understandings on the other hand, and in light of Shonerd's (1994) findings, both may be evidence of increased language ability.

A second environment in which candidate understandings appeared was in multiples targeting lexical trouble sources. Most importantly, this shows that while the above-mentioned tendencies are certainly observable, there are other selection criteria for the types of repair initiations available to and used by the learners. It particularly highlights a selection principle previously shown to exist in native speakers: the increase in specificity of other-initiations in multiples. If one otherinitiation fails to yield the desired result (i.e., a repair operation that would be successful in resolving the trouble), a second (or, in the case of nonnative speakers, third or fourth) other-initiation that is more specific in identifying the trouble source will be used. It makes sense then that candidate understandings, being the most specific type of other-initiation available, would also appear in sequences where the trouble is not necessarily content-related in nature, but where another type of otherinitiation was previously unsuccessful in resolving the trouble. Yet another selection principle was described in relation to partial repeats, which, despite their tendency to occur with lexical troubles, appeared also in response to sequential and contentrelated trouble sources, particularly in Group 3. While it is not clear which selection principle was used in these instances, the fact that most of the trouble sources in question were in English, i.e., the native language of all study participants, it was hypothesized that the speakers could be using a selection principle found in native speakers: to select the type of repair-initiation that is as specific as necessary to yield the type of repair operation necessary to resolve the trouble.

Groups 1 and 2, however, did indeed primarily use partial repeats to attend to lexical problems and also used more partial repeats in general than Group 3 did. This is not surprising, given that these are also the two groups that were found to attend primarily to lexical (i.e., language-related) troubles. However, partial repeats are also linguistically not very complex, which may be another reason why they are frequently used in these groups, who have had, arguably, less exposure to and interaction with the target language than Group 3. This may also be the reason why non-specified repair initiations are so frequent in Group 1, despite the fact that this group does not attend to a particularly large number of sequential problems. These other-initiations are structurally simple and thus easily used, but are not well-suited to target troubles other than sequential ones or those targeting an entire turn, as they are not able to identify specific trouble sources. It is thus not surprising that it is also primarily in Group 1, i.e., where these non-specified other-initiations are most frequently used to attend to lexical problems,³⁰ that such sequences turn into multiples, as other, more specific, other-initiations are frequently subsequently needed to identify the trouble correctly and resolve the problem.

The opposite can be argued in the case of other-initiations containing question words. These are more complex types of other-initiation, as they require a certain amount of analysis of the trouble source before they can be deployed, and it is possible that that is the reason why these do not appear in Group 1. This would suggest that there may indeed be a correlation between the amount of knowledge of the language a learner has and the types of repair initiations he or she tends to use

(Egbert, 1998). It is also possibly the reason why these types of repair initiations tend to appear more frequently with content-related or sequential types of problems, rather than lexical problems. If a trouble source is lexical in nature, it is not lexically understood, i.e., its meaning is unclear to the recipient. It would appear that this can, though not necessarily, preclude an analysis of the trouble source. If the meaning of a word is unknown, it can be impossible to determine whether a question word should be 'what?' or 'who?'. Thus, it appears unlikely that lexical troubles would frequently lead to a repair initiation containing a question word.

4. The Repair Operation

4.1. Introduction

Within the framework of a repair sequence, the repair operation is the second pair part of the repair adjacency pair, whose first pair part was the repair initiation, thus setting in motion the trajectory conditioning an eventual repair operation. As discussed in chapter 2, this repair operation may not always occur in the serially next position (e.g., if an insertion sequence becomes relevant during the repair initiation), but generally occurs in the sequentially next position. As with repair initiations, repair operations can be performed by either 'self' or 'other'; however, due to the preference structure inherent in repair sequences (see chapter 2 for a detailed discussion), there is a strong preference for self-repair over other-repair, with structural opportunities for self-repair regularly preceding those for other-repair. Specifically, after an other-initiation has been issued, the first chance for a repair operation is regularly allocated to the trouble source turn speaker, i.e., 'self'. As research has repeatedly shown, this opportunity for self-repair is normally taken by the trouble source turn speaker and self-repair thus ensues (Schegloff et al., 1977). This is true even in multi-party interaction, where it is possible for a third person, i.e., someone other than the trouble source turn speaker or the repair-initiating speaker and thus not someone originally involved in the repair sequence, to attempt a repair proper; however, when this happens, such action is strongly dispreferred and in fact may even be sanctioned (Egbert, 1997). This strong preference for self-repair – not only in other-initiated repair sequences, but in repair sequences in general – has been

shown to hold in both NS (e.g., Schegloff, 1977; Egbert, 2002) as well as NNS interaction (e.g., Buckwalter, 2001). I will discuss this aspect of repair operations as it relates to my data in more detail in section 4.2.

However, while repair operations in naturally-occurring interaction are designed to resolve trouble as quickly and efficiently as possible (Egbert, 1998, p. 149) and, at least in NS interaction, have been shown to accomplish this (i.e., troubles are usually repaired within two turns, one repair initiation turn, where the trouble is indicated, and one repair operation turn, where it is resolved [Egbert, 2002]), in interaction involving NNSs, this may not always be the case. Specifically, repair sequences involving NNSs may be both more elaborate and more complex than those involving only NSs (Egbert, 2002).

However, while a strong preference for self-repair over other-repair has been established in the literature and a possible influence of non-nativeness on the structural efficiency of the repair sequence has been documented, there have been relatively few answers as to (1) how trouble source turn speakers may be able to determine what kind of problem the repair-initiating speaker is facing and (2) how to resolve this problem most efficiently or effectively (Sidnell, 2006, as cited in Svennevig, 2008, p. 346). While I have identified a systematic mechanism in the data regarding the first question in chapter 3, this chapter will more specifically relate to the second question, i.e., how specific problems can be resolved quickly and efficiently. However, unlike for repair initiations (which research especially involving NNSs tends to focus on), no well-defined repair operation techniques have

thus far been agreed upon in the literature on repair operation. A notable exception are repetitions of the trouble source, which have been identified as generally following non-specified repair initiations, as these generally target the entire preceding turn as the trouble source (Egbert, 2002, p. 140; Svennevig, 2008, p. 346). While this relationship between non-specified repair initiations and repetitions of the trouble source can be observed in my data, there are several additional regularities that I will discuss in more detail in section 4.3 of this chapter.

4.2. The Preference for Self-Repair

Akin to what has been found in native speaker behavior in both English and German, as well as time and again in nonnative speaker interaction, other-initiations in the data were overwhelmingly self-repaired. In fact, almost all other-initiated repair instances in the data that are not what is – especially in the context of SLA – generally referred to as 'corrections' (i.e., true other-initiated other-repair sequences)³¹ lead to self-repair. Examples of this have already been discussed in excerpts (8) and (20), among others. There are overall only 7 other-initiated repair sequences in the data that result in other-repair, and when other-repair *does* occur, it occurs in very specific sequential environments. One such environment is multiples in which the *initial* repair operation was, in fact, performed by the trouble source turn speaker (thus, a self-repair *has* occurred) but the trouble was not successfully resolved. Consider the following lines from excerpt (24) again:

(24) [Lesen, Group 1]³²

```
10
      Marc:
                  hast du [gelesen?
                  have you[read?
                  Did you [read?
11
      Linda:
                           [that's the one my roomma[te was
12
      Alison:
                                                        [hmmm?
13
      Linda:
                  watching
14 \rightarrow Marc:
                  hast du gelesen?
                  have you read?
                  Did you read?
15
                  (1)
16
      Alison:
                  gelese[n?
                  read [
17 \rightarrow Linda:
                         [gelesen emm
                         [read
                                um
18
                  (0.2)
19
      Alison:
                (I don't kn[ow)
20 \rightarrow Linda:
                               [lesen
                               [to read
21
     Marc:
                               [lesen
                               [to read
```

In line 10, Marc asks Alison a question, "Did you read?" However, in overlap with Marc's question, Linda is also addressing a turn to Alison (line 11). As a result, Alison issues a non-specified repair initiation in line 12. As discussed in section 4.1, such non-specified repair initiations frequently lead to repetitions of the trouble source, as they frequently indicate hearing or sequential problems. This, in fact, appears to be how Marc interprets the trouble, as he simply repeats the trouble source in line 14, i.e., he issues a self-repair. However, in line 16, Alison subsequently issues another repair initiation. This second repair initiation is in the form of a more specific partial repeat, thus specifically locating the trouble source and possibly

indicating that the problem may be of a lexical (or in this case, morphological) nature. This partial repeat, however, is only issued after the first repair operation, a selfrepair, was unsuccessful in resolving the trouble. It is only now (in line 17) that Linda, i.e., a conversation participant *other* than the trouble source turn speaker, issues a repair operation, i.e., an other-repair. In this particular sequence, Alison's eye-gaze in line 16 could not clearly be determined; thus, it is not clear whether or not Alison may have specifically selected Linda as next-turn speaker. However, in all other such instances in the data, a specific third speaker is indeed specifically selected to perform the repair operation by the repair-initiating speaker (see, for example, excerpt [34]), suggesting that this may be the case here, as well. Even if it is not the case, however, the fact remains that while other-repair occurs in these instances, it is only issued after an (unsuccessful) attempt to self-repair has taken place, with a third speaker allowing for such self-repair to occur before attempting to (other-) repair. Hence, the preference for self-repair remains borne out in these types of sequences, even though other-repair does occur. This is in line with Egbert's (1997) previous research, which has shown that other-repair by a third speaker may be dispreferred (and, in fact, sanctioned, should it nevertheless occur) and that there are conversational mechanisms that allow for self-repair to occur before other-repair becomes acceptable.

Another, but similar, environment in which other-repair occurs is when the other-initiation occurs within self-initiated other-repair sequences, as in the following example:

(30) [Kleider, Group 2, simplified]

```
[moves
                                                       hands from
01 \rightarrow Rachel: er trägt äh .h °em (kleid:)° (.) äh[ [frauen:
                he wears uh em (dress)
                                              uh[ [women
02
                                                     [u[h-. uh-,
     Meg:
                [head to toe and back
03
     Rachel:
                [hehe
04
     Meg:
                [u:h
05
               [heh hehe[he[he
     Lacy:
06
     Meg:
                          [eh[ehh
07
     Daphne:
                             [trägt frauen? frauen ( [ ,)
                             [wears women? women ( [ )
08 \rightarrow Meg:
                                                       [kleider.
                                                       [clothes.
               kleider, ja
0.9
     Rachel:
                clothes yes
```

In this example, the trouble source is a trouble source in two ways. In line 01, Rachel is engaged in a self-initiated other-repair sequence, specifically, a word search.³³ Her engagement in such a word search is initially indicated by a number of speech perturbations ('äh', 'em'), followed by repeated attempts to produce the word, and finally by enlisting other conversation participants' help when she begins gesturing the word she is looking for while sweeping her eye-gaze across various conversation participants. Meg appears to understand what Rachel is looking for, which she indicates through a number of non-lexical utterances in line 02, but is not able to produce the actual lexical item at this point. Shortly thereafter (line 07), Daphne also responds to Rachel's search attempt, albeit not with a repair operation to solve Rachel's word search, but by initiating repair on it. While it is not clear whether this indicates a problem Daphne has with Rachel's utterance, or whether it may, in fact,

serve the purpose of gaining new information on the item in question in order to assist in the word search, it is unlikely that Rachel will be able to issue a repair operation in response to it, as she is herself still engaged in a word search on the specific item Daphne has just other-initiated repair on. This opens the floor to another speaker, in this case Meg, to repair Daphne's trouble (line 08). While this is different from excerpt (24) in that the trouble source turn speaker (here, Rachel) does not actually attempt a self-repair before a third speaker performs the other-repair, the other-repair may nevertheless be acceptable in such instances because the trouble source of the ongoing other-initiated repair sequence is identical to the trouble source of the word search sequence in which it is embedded, thereby (1) making it unlikely that Rachel will be able to self-resolve this trouble, and (2) creating a situation in which the trouble source turn speaker has, in fact, already yielded the floor on the matter to other speakers by way of engaging them in a collaborative word search. These sequences are similar to the previously described sequences in that the original trouble source turn speaker is unable to resolve the trouble successfully, whether a self-repair is actually attempted (as in excerpt [24]) or not (as in excerpt [30]).

A third environment in which other-repair occurs in the data is if the speaker initiating the repair is the same speaker who eventually repairs his or her own trouble (i.e., he or she was able to resolve the problem before another speaker was needed to assist in doing so), thus rendering a self-repair by the trouble source turn speaker unnecessary before one is issued. Consider the following example:

(31) [Bären, Group 1]

```
Sam:
                   aber keine f- ääh (baren),
                        no f- uuh bears,
02
                   (1.2)
03 \rightarrow Marc:
                   baren?
                   bears?
04
                   (1)
                   baren. jaa[a
05 \rightarrow Marc:
                   bears. yes[
06
      Sam:
                               [eheh
```

In line 01, trouble-source turn speaker Sam makes a statement about bears. Marc, however, appears to have a problem with the word Sam uses ('baren'), thus initiating repair on it through a partial repeat in line 03. According to the general preference for self-repair, it could be expected that Sam gets priority in taking the floor to selfrepair the trouble. It is not immediately evident, however, whether he is going to take the floor or not, as a lengthy pause follows. This is not necessarily unusual in the data, even in cases of subsequent self-repair. However, after the pause, it is then not Sam, but Marc again who takes the floor to repair the trouble source. He does this by repeating the word with falling intonation and following it with an affirmative 'yes', thus indicating that the trouble is resolved for him (that this is indeed the case is further evidenced by the ensuing conversation.³⁴ in which he proceeds to explain the word to Linda, who also indicates a problem with the same word later in the conversation). Generally, it could be expected that this repair operation by Marc (who is not the trouble source turn speaker) would be dispreferred. There is, however, no evidence of such dispreference. The pause in the transition relevance place after Marc's repair initiation could be interpreted as being intended to provide

Sam with time to take the floor and produce the repair operation. However, he does not do so. It could be argued then that by not taking the floor to self-repair during the lengthy pause, Sam passes on his turn and opens up the floor to other conversation participants to complete it. However, although it is not clear why such lengthy pauses appear so frequently, 35 they are not at all unusual in the data and are generally, regardless of length, eventually followed by a self-repair. This suggests that it is not the pause that makes it acceptable for Marc to take the floor again in the next turn. Rather, it appears that when he does so, he not only repairs the original trouble source (by signaling his understanding), but also issues a repair of his own utterance (the repair initiation) from line 03. Thus, he now treats his other-initiation like a trouble source (i.e., a problem in his own speaking, possibly a 'misspeaking' or 'speaking too soon') and consequently now issues a self-initiated *self*-repair on this trouble source. Viewing the sequence from this perspective, Marc is now the new trouble source turn speaker, which makes it acceptable, and indeed preferred, for him to repair his own trouble. The fact that there are no indications in the sequence suggesting a dispreferred action in Marc's repair behavior supports this analysis.

I shall briefly summarize the above analysis. I have shown that while the preference for self-repair is borne out in the data, other-repair does occur. However, it only occurs in very specific environments in which it appears to be acceptable. The first two environments in which other-repair occurs in the data, i.e., in multiples after unsuccessful self-repair attempts or within self-initiated word search sequences, clearly have one characteristic in common: They only occur when the inability of the

preferred speaker, i.e., the trouble source turn speaker, to self-repair the trouble source has already been displayed to the other conversation participants. This allows a third speaker to provide the repair operation because even though the trouble source turn speaker was not able to provide a successful, or any, repair operation, the preference for self-repair in itself was not violated, be it because the trouble source turn speaker has already issued an (unsuccessful) self-repair or because he or she is already engaged in a collaborative word search, thus having already displayed trouble with the item in question. While it may very well be the case that the trouble source turn speaker is not able to provide the repair operation in the third environment where other-repair occurs, as well, this is unlikely. Initially, the long pause in excerpt (31) may suggest such an analysis; however, there are occurrences of this phenomenon in the data where there is no discernable pause (other than the transition-relevanceplace) between the repair initiation and the eventual repair operation by the same speaker. It is therefore likely that the explanation for the occurrence of other-repair in the third environment lies elsewhere. Specifically, I have proposed that a shift in orientation may take place: Before the original other-initiated repair sequence can be completed, the speaker of the other-initiation turns it into a self-initiated repair sequence. This is achieved by treating the other-initiation as a new trouble source and subsequently self-repairing it, thereby simultaneously eliminating the need to repair the original other-initiation.

4.3. Types of Repair Operations

4.3.1. Introduction

While the groups in the study do not differ much in regard to their preference for self-repair (i.e., they all display this preference), they do, however, exhibit differences in the types of repair operations they use. While no general system akin to that used for repair initiations is available for categorizing repair operations, for the purpose of this study, they were categorized as follows: (1) *repetitions* of either the entire trouble source or a part thereof, (2) *explanations* (which can be verbal, including translations, or non-verbal, such as gestures, in nature), a category which I expanded to include *expansions* (often in the form of a specification) on the trouble source, and (3) *acknowledgments* (such as 'yes'). Table 5 shows the total number of occurrences for each pattern in the data.

Table 5.

Types of Repair Operations and Number of Occurrences³⁶

Types of Repair Operations and Number of Occurrences		
Type of repair operation Number of occurrence		
Explanations	48	
Repetitions	31	
Acknowledgments	19	
Ambiguous	5	

Table 5 shows that explanations and repetitions, appearing either by themselves or in combination with another pattern, were the most frequently occurring repair operation patterns, with the acknowledgment pattern being less common. While all patterns appeared in all groups and in response to all types of repair initiations, certain tendencies for their occurrence were nevertheless observable. In the following,

examples of the various patterns will first be provided, followed by a discussion of observable tendencies in their appearance across groups.

4.3.2. Explanations

As evident in Table 5, explanations were overall the most frequently occurring type of repair operation in the data. An example of this type of repair operation was seen in excerpt (8),³⁷ which is reprinted below:

(8) [Esperanto, Group 1, simplified]

```
Richard:
                .h du sollst esperanto lernen hehe
                 .h you should esperanto learn hehe
                you should learn esperanto
02
                (.)
0.3
   Linda:
                hm?
04 \rightarrow Richard: du- du sollst- auch esperanto lernen heh.hh
                you- you should- also esperanto learn heh
                you should also learn esperanto
05 Linda:
                esperanto,
06 \rightarrow Richard:
                .h ist die: (.) ääh internal-
                .h is the uuh internal-
                is the international
07
                internaschion:alisch
                internationalish
80
                (0.4)
09
   Linda:
               00 [ h
10 \rightarrow Richard:
                  [mund heh
                  [mouth heh
                   language
```

After Richard's suggestion to Linda to study Esperanto in line 01, Linda originally issues a non-specified repair initiation (line 03), which Richard attempts to repair with a repetition (line 04) of his original statement. As evident in line 05, however,

Linda's trouble is not resolved and she again initiates repair, using a partial repeat. As discussed in section 3.3.1.1, this may indicate to Richard that Linda is experiencing trouble with the meaning of that particular word; he thus now begins to explain to Linda what the word means (lines 06, 07, and 10). Due to the nature of Linda's trouble (namely, lexical), it is likely that neither an acknowledgment nor a repetition would have resolved her problem (and, in fact, did not in the first attempt), as neither pattern provides any new or additional information about the lexical meaning of the troublesome item. This suggests that particular types of repair operations may be more suitable to resolve particular types of problems. Lexical troubles, as seen in this excerpt, for example, appear to be repairable primarily by explanations. This is supported by the fact that while there are several instances in the data where it was attempted to repair lexical troubles with a repetition or an acknowledgment, these are generally unsuccessful attempts, ³⁸ ultimately requiring additional repair initiations and thus turning the repair sequence into a multiple, as exemplified in excerpt (8).

Considering their apparent suitability to resolve lexical types of troubles, it could be expected that explanations are particularly common in Groups 1 and 2, both of whom were shown to exhibit a strong focus on treating lexical types of troubles in section 3.3.1.4. However, while approximately one half of all repair operations in Group 2 (as well as in Group 3) do indeed make use of explanations, this is only the case in less than one third of all instances in Group 1. Table 6 shows the distribution of the repair operation patterns across the various groups.

Table 6.
Types of Repair Operations and Number of Occurrences Across Groups

Type of repair operation	Group 1	Group 2	Group 3
Explanations	7	18	23
Repetitions	9	10	12
Acknowledgments	4	6	9
Ambiguous	2	2	1

This relative dearth of explanations despite the frequent attention to lexical troubles in Group 1 may be related to the linguistic structure explanations can take: While they also encompass translations into the L1 and gestures, both of which are relatively linguistically non-complex forms of repair operation, they can also lead to newly and independently produced language in the L2, where a speaker produces language not previously uttered by another speaker during the sequence in question (as would be the case with repetitions or partial repetitions), and thus be a potentially linguistically more complex means of repair operation. This analysis is supported by the fact that, as a closer analysis reveals, Group 1 not only quantitatively but also qualitatively differs from the other groups in their use of this particular repair operation pattern. Specifically, almost all occurrences of explanations in Group 1 are either translations into English (e.g., excerpt [23]) or non-verbal gestures, but are rarely ever indicative of newly produced independent language; in fact, the only two instances of explanations in Group 1 that use German in the explanation were provided earlier in excerpt (8) and (24). In contrast, the other groups frequently use the L2 in their explanations.

While both the frequent use of explanations as well as their higher complexity may be another indication for an increased willingness or ability to independently produce new language in Groups 2 and 3 (similar to what was found for candidate understandings in repair initiations), the higher frequency of explanations in Groups 2 and 3 could, on the other hand, also be related to the specific environments in which they tend to occur: The environment in which explanations tend to occur in Groups 2 and 3 is noticeably different from that in which they tend to occur in Group 1. Specifically, most explanations in Group 3 follow from candidate understandings and, similarly, generally derive from either candidate understandings or explicit questions in Group 2. In both groups, they are frequently used to target content-related troubles, suggesting that, apart from their suitability for resolving lexical troubles (as discussed above), explanations are also suitable and commonly used to successfully resolve content-related troubles. However, both candidate understandings and explicit questions, along with content-related trouble sources, appear relatively infrequently in Group 1 (together accounting only for about one fourth of all repair initiations). In contrast, explanations in Group 1 tend to appear in multiples; specifically, after another attempt at resolving the (generally lexical) problem has already proven unsuccessful (see excerpts (8) and (24) for examples). Thus, it is possible that Group 1 first selects other, more structurally simple, repair operation patterns (such as repetitions or acknowledgments), regardless of the nature of the trouble source or the repair initiation, and only selects the more complex explanations later, when and if necessary. This analysis is supported not only by the fact that even

when Group 1 selects explanations in repair operations, these generally remain non-complex (i.e., translations or gestures), but also by the fact that they have also already been shown (see section 3.3.2.2) to exhibit this kind of selection mechanism in their use of repair *initiation* strategies, as well. Consider excerpt (8) again:

(8) [Esperanto, Group 1, simplified]

```
01
     Richard:
                 .h du sollst esperanto lernen hehe
                 .h you should esperanto learn hehe
                 you should learn esperanto
02
                 (.)
03 \rightarrow Linda:
                hm?
04 \rightarrow Richard: du- du sollst- auch esperanto lernen heh.hh
                you- you should- also esperanto learn heh
                you should also learn esperanto
05 \rightarrow Linda: esperanto,
06 \rightarrow Richard: .h ist die: (.) ääh internal-
                 .h is the uuh internal-
                 is the international
07
                 internaschion:alisch
                 internationalish
80
                (0.4)
09 Linda:
               00 [ h
10 \rightarrow Richard:
                 [mund heh
                   [mouth heh
                    language
```

Following Linda's repair initiation in line 03, Richard initially selects a (structurally less complex) repetition to attempt to resolve this problem. It is only after Linda's second repair initiation in line 05 that he issues the more complex explanation.

However, while there is an observable general tendency in Group 1 to preferably select less linguistically complex repair operations, their prevalence (and thus the relative dearth of explanations) also appears to be closely related to the types of repair

initiations most frequently used in this group. Specifically, while it is true that when explanations are used in Group 1, they tend to occur in multiples, these multiples tend to exhibit a specific structure: that of repair sequences targeting lexical problems and initially attended to by a non-specific repair initiation (line 03 in the above excerpt) – a type of sequence particularly frequently associated with this group (as discussed in section 3.3.2.2) and exemplified in excerpt (8) above. However, non-specified repair initiations are more typically associated with sequential, rather than lexical, types of trouble sources (see section 3.3.2.2), thus possibly leading to a repair operation more suitable for repairing sequential types of troubles: a repetition. As sequential types of problems are often problems of hearing (due to, for example, overlapping speech) or result from unexpected changes of topic, they are frequently not indicative of linguistic problems; thus, it makes sense that repetitions can successfully resolve such problems. They are, however, not suitable for repairing lexical types of troubles, as they supply no additional information about the lexical meaning of an item. It makes sense then that such sequences subsequently turn into multiples (as observable in excerpts [8] and [24]). Thus, it is possible that the unsuccessful initial repair operation (the repetition) in such multiples is less a result of an incorrect interpretation of the trouble source than of a *correct* interpretation of the trouble source as mediated by the (perhaps unsuitable) repair initiation.

4.3.3. Repetitions

In fact, it is primarily in response to non-specific repair initiations (but also, specifically in Group 1, with some frequency in response to partial repeats) that repetitions occur in the data. Repetitions, in general, constitute the second frequently used type of repair operation in the data. Several examples have already been seen in section 3.3, for example, excerpts (8) above, (19), (22), or (24), the latter of whose pertinent lines are reprinted below:

(24) [Lesen, Group 1]

```
10 Marc: hast du [gelesen?
have you[read?

11 Linda: [that's the one my roomma[te was
12 Alison: [hmmm?

13 Linda: watching
14 → Marc: hast du gelesen?
have you read?
```

In this example, Alison's repair initiation in line 12 targeting Marc's question to her in line 10 leads to Marc repeating his initial utterance (line 14), i.e., the trouble source. This type of repair operation is perhaps not unexpected in this environment, as previous research has suggested that the majority of non-specified repair initiations that occur by themselves (as was the case in this excerpt) lead to such repetitions of the trouble source (Egbert, 2002; Svennevig, 2008). This makes sense as non-specified repair initiations can not only serve to target the entire trouble source turn as problematic (Egbert, 2002), but are also frequently used to treat sequential types of problems (see section 3.3.2.2), both of which are trouble sources that can be resolved with a repetition. In contrast to explanations, repetitions are more frequent in Group

1 (accounting for more than one third of all occurrences in that group) than in the other groups, where they account for only approximately one fourth of all occurrences. This preference for repetitions in Group 1 may again be a result of their relative structural simplicity; they simply repeat (part of) an already previously produced utterance and require no production of new and independent language. However, it is significant to note that the repetitions used in Group 1 are largely unsuccessful. As discussed above, this may be a result of the type of trouble they are used to repair in this group. While repetitions, in general, most frequently occur in response to non-specified repair initiations or partial repeats in the data (although they occasionally occur in response to other types of repair initiation, as well), there are differences across groups. While, for example, in Group 3, repetitions in response to such non-specified repair initiations tend to occur with sequential types of problems, in response to which non-specified repair initiations are a suitable means of initiating repair (as discussed in section 3.3.2.2), in Group 1, repetitions in response to nonspecified repair initiations often occur with lexical troubles and are thus generally ultimately unsuccessful in resolving such trouble, as they offer no further information about the lexical meaning of a word. The same is true for repetitions occurring in response to partial repeats which attempt to treat lexical problems. It is not surprising then that in Group 1, these sequences tend to turn into multiples, with different repair operations later used to resolve the problem (the reader be again referred to excerpts (8) or (24) for examples). While it appears that certain types of repair operations are thus better suited to resolve particular types of troubles than others, speakers appear

to orient to the type of repair initiation as an indication for the type of trouble and thus select a repair operation likely to resolve this type of trouble. The chosen repair initiation, however, may not be the one otherwise frequently used to target a specific type of trouble, thus triggering a repair operation not suited to resolve this particular type of problem and, as a result, frequently leading to multiples. This lends further support to the analysis put forth in section 3.3.2, arguing that the selection of a given type of repair initiation can be indicative of the type of problem faced by a speaker initiating repair.

4.3.4. Acknowledgments

The above finding is also supported by an analysis of the third repair operation pattern, acknowledgments, which is the least frequently appearing pattern in all groups (but appears approximately equally frequently in all). Consider excerpt (32):³⁹

(32) [Flavor ice, Group 1, simplified]

```
01
              ich ess[e ääh (1) popeis
    Marc:
                  eat[ uuh pop ice
02
               (.)
03
    Linda: OOH [nicht
              ooh [not
    Alison:
04
                   [ooh (.) flavoreis?
                  [ooh flavor ice?
05 → Marc:
              jaa
               yes
```

In this example, Marc repairs Alison's candidate understanding (line 04) 'flavoreis?', where she offers her understanding of the trouble source, by simply affirming her

understanding (line 05). In fact, it is in response to such candidate understandings that the acknowledgment repair operation pattern most often occurs, but it can also be found with some frequency in response to partial repeats. However, as discussed in section 3.3.2.1, candidate understandings are often associated with content-related trouble sources, while partial repeats are frequently associated with lexical types of troubles. Thus, it may be expected that such agreements may be more successful in resolving content-related troubles operated on by candidate understandings than lexical troubles operated on by partial repeats, as the latter have already been shown to be most successfully resolved by explanations. This is, in fact, borne out in the data: In those sequences in which acknowledgments follow candidate understandings used to attend to content-related troubles, the acknowledgments are usually successful in resolving the trouble, while in those sequences in which acknowledgments follow partial repeat used to attend to lexical troubles, they are not (see excerpt (34) for an example), as they, akin to repetitions, also offer no new information about the lexical meaning of a word.

It is perhaps not surprising that it is particularly partial repeats and candidate understandings that appear with acknowledgment repair operations, as both can, or in the case of candidate understandings, always do, serve as comprehension checks.

Consider excerpt (20) again:

(20) [Oma, Group 2]

```
01 Meg: wie rea[giert (.) was äh äh [denkt] sie how rea[cts what uh uh[thinks she how rea[cts, what does she think?

02 Steve: [mhm [
```

```
03
   Daphne:
                                             [denkt
                                             [thinks
04
                (1.5)
0.5
     Daphne:
               hm?=
06 → Steve:
               =was denkt sie über die tina ist (.) weg?
                what thinks she about the Tina is gone?
                what does she think about Tina being gone?
07 \rightarrow \text{Meg}:
                ja hah=
                yes heh
08
     Steve:
               =sie:
                she
09
                (.)
10
   Meq:
               hah ha[ .h
11
     Steve:
                      [she doesn't care
12
                jaa hahahahaha
     Meq:
                yes hehehehehe
```

In this excerpt, Meg asks Steve a question (line 01). When Steve initiates repair on this question in line 06, it appears that he understood what Meg has said (that is, no lexical trouble is evident), but seeks to confirm that his understanding of the content of Meg's questions is correct. If comprehension can indeed be established during such a comprehension check, an acknowledgment appears to be a logical and sufficient response. Hence, this is what Meg subsequently does; she issues an acknowledgment in line 07.

4.4. Summary and Discussion

The preceding analysis suggests a systematic organization of repair operations that previous research has rarely focused on. Specifically, repair operations, akin to repair initiations, may not be randomly chosen, but their occurrence may, in fact, be a

function of both the type of trouble source and the type of repair initiation used in a given repair sequence. For example, explanations appear to be the only repair operation pattern occurring in the data that are suitable to repair lexical types of trouble source. This is likely due to the fact that they, in contrast to both repetitions, which simply repeat the trouble source, and acknowledgments, which generally only consist of an affirmative 'yes' or similar – non-lexical – item, can supply new information on the trouble source (e.g., in an explanation or a translation of a troublesome lexical item), which appears to be necessary to resolve a lexical type of problem (see excerpts (8) and (24) for examples). Apart from their ability to resolve lexical types of troubles, explanations also frequently feature in repair sequences dealing with content-related trouble sources. This makes sense, as content-related trouble can also be resolved by supplying additional or new information (see excerpts (18) and (28) for examples). While explanations do not regularly appear with hearing or sequential types of troubles in the data (there is only one occurrence of this), it would make sense that they can also successfully resolve such troubles, even though the new or additional information may potentially be redundant in those instances (which may, in fact, explain why they do so rarely occur in response to such troubles). In the only instance in the data that features an explanation in response to a sequential trouble source, this repair operation indeed successfully resolves the trouble. Overall, explanations thus appear to be a relatively successful repair operation pattern, regardless of type of trouble source, i.e., they can likely be used to repair different types of trouble sources and can appear with any of them. They

appear, however, to be strongly linked to lexical types of trouble sources, where they may be required to successfully resolve the trouble. However, as they can potentially be more linguistically complex than other types of repair operations, they may be less frequently used in some groups, specifically, in Group 1, than others even in cases where they present the only suitable repair operation option (i.e., with lexical trouble sources).

In contrast to explanations, which appear to be suitable for resolving various types of troubles, both the repetition and acknowledgment patterns regularly appear predominantly only with specific types of trouble sources, namely sequential and content-related trouble sources, respectively. This association of repetitions with sequential types of problems makes sense, as sequential problems are frequently not indicative of problems inherent in the language or the content conveyed in it, but rather, are related to the external context of the conversation, e.g., hearing problems due to background noise or overlapping speech. Thus, a repetition under changed external circumstances (i.e., no more simultaneous speech or temporary background noise) frequently suffices to repair such trouble. Similarly, the association of acknowledgments with content-related trouble sources also makes sense, especially since this operation pattern generally appears in comprehension checks, where, if comprehension can indeed be confirmed, only an affirmative response is necessary to resolve the trouble. Although both acknowledgments and repetitions also occasionally feature in repair sequences addressing lexical types of trouble sources,

they tend to be unsuccessful in resolving such trouble sources, the reasons for which were discussed above.

While it thus appears that certain types of repair operations may be better suited to resolve certain types of problems, thus linking their occurrence to those types of troubles, the selection mechanism for using a specific type of repair operation appears to differ across groups. The data suggests that the cue for selecting a specific type of repair operation is generally the repair initiation. Explanations, for example, appear to ensue primarily from candidate understandings and explicit questions, while repetitions appear to ensue primarily from non-specified repair initiations, which makes sense, given the association of non-specified repair initiations with sequential types of trouble sources. The third type, acknowledgments, appears to follow primarily from candidate understandings and partial repeats, which may be related to the fact that both are typical forms of comprehension checks, which, if successful, only require an affirmative confirmation. Thus, the cue for the speaker expected to perform the repair operation as to the most likely successful type of repair operation appears to be built into the repair system: He or she orients to the repair initiation for information on the type of trouble, thus gleaning from the repair initiation the information necessary to select an appropriate and most likely to succeed type of repair operation. This highly systematic nature of the repair system can help explain why repair is generally an efficient mechanism, as evidenced by the low number of occurrences of multiples (to be discussed in the following chapter): By using a specific type of repair initiation, the repair- initiating speaker already

builds the information the repair operation speaker needs to successfully resolve his or her trouble into his or her turn, thus attempting to ensure that the trouble can be resolved quickly and efficiently and rendering any 'guessing' on the part of the repair operation speaker about the nature of the trouble source unnecessary.

This mechanism supports the analysis put forth in section 3.3.2 that certain types of troubles are best addressed by certain types of repair initiations. It appears now that one reason for this association of certain types of trouble sources with certain types of repair initiations may be that it allows for the repair operation speaker to draw conclusions from the repair initiation as to the nature of the trouble source and therefore select the most appropriate type of repair operation for a given situation, thereby enabling the conversation participants to resolve the trouble as efficiently as possible. By extension, this means that an unsuccessful repair operation may not necessarily result from an incorrect interpretation of the nature of the trouble source on the part of the repair operation speaker, but may, in fact, result from an incorrect presentation of the nature of the trouble source to the repair operation speaker by the repair-initiating speaker by way of his or her repair initiation (e.g., by selecting a repair initiation on the basis of structural simplicity).

In Groups 2 and 3, speakers for the most part appear to orient to this mechanism in both the selection of a repair initiation as well as of a repair operation; thus, trouble sources in those groups tend to be resolved quickly and efficiently. In Group 1, however, a different type of selection mechanism may play a significant role, as well. As was the case in selecting repair initiation strategies, Group 1 also

appears to preferably select linguistically simple repair operation strategies (namely, repetitions and acknowledgments) over other, potentially more linguistically complex, repair operations, i.e., explanations. In fact, repetitions and acknowledgments are used twice as frequently in Group 1 as explanations are; in contrast, explanations are used twice as frequently in Groups 2 and 3, respectively, as repetitions and acknowledgments are. Even in those cases where Group 1 uses explanations, those tend to remain structurally simple. Thus, even though Group 1 exhibits a large amount of lexical trouble sources, which are most likely successfully resolved by an explanation, group members nevertheless frequently initially select repetition repair operations in those situations before eventually selecting explanations. However, in many of those instances, this may not only be due to the linguistically simpler structure of repetitions, but may, in fact, be a result of the linguistically non-complex repair initiations favored by this group, specifically, nonspecified repair initiations. As those tend to be associated with sequential types of trouble sources, a repetition would, in fact, be the appropriate type of repair operation. Thus, while Group 1 does exhibit a tendency towards structurally simpler repair operation patterns, they nevertheless appear to follow the previously formulated repair mechanism for selecting an appropriate repair operation for the most part, suggesting that the source of its preference for structurally simple repair operations may, at least in part, lie in its preference for structurally simple repair initiations, rather than in the repair operations per se.

It is clear, then, that all three groups, despite being independent of one another, orient to this systematic mechanism outlined in chapters 3 and 4. While it could be argued that the fact that all groups are enrolled in German classes at the same university and in the same German language program (namely, that the mechanism may be taught in class) may influence the appearance of this mechanism, this is unlikely. Specifically, there was neither overt instruction on repair mechanisms in the course curricula, nor evidence that the students in the study abroad group, who had significant input from native speakers of German, orient to the mechanism differently from the other groups. The fact that all three groups thus orient to this mechanism suggests that it may be a universal mechanism in the organization of repair, inherent in the organization of repair in both English and German, or, alternatively, may be a regular feature of pragmatic interlanguage in American learners of German. However, the structure of each learner's interlanguage system need not necessarily be identical – although this is possible – in all learners involved in this project. Thus, learners may be orienting to an organization of repair that is beyond the individual's interlanguage system. It is noteworthy, then, that all learners, despite their varying and relatively low levels of language ability, are able to orient to this highly systematic structure. This suggests that although interlanguage mechanisms may play a role, there are likely mechanisms involved that go beyond the interlanguage system. That is, some aspects of this systematic repair mechanism may be context-free, i.e., a universal feature of repair sequences in general, or it may be a feature common to the organization of repair in both English and German, in which

case positive L1 transfer, i.e., the successful transfer of native language (L1) strategies into the target language (L2), likely plays a role. I will return to this point in more detail in chapter 6.

5. Interactional Analysis

5.1. Introduction

While the previous chapters have focused on structural elements of the repair sequence (i.e., the repair initiation and the repair operation), in this chapter, I will discuss some interactional aspects in other-initiated repair. Specifically, I will focus on (a) multiples, here defined as repair sequences in which more than one repair initiations occur in response to the same trouble source, and (b) affiliation.

Multiples, although a recurring feature in previous chapters, are overall rare in the data, i.e., most troubles are resolved within one repair initiation. Akin to what research results have long indicated to be true for native speakers, repair thus appears to be a generally very efficient mechanism, even among nonnative speakers (see chapter 4 for more discussion). However, as previous research has shown, when multiples do occur in nonnative speakers, they are frequently more complex than has been documented for native speakers (Egbert, 2002). In order to discuss multiples in more detail in the context of this study, in the following, I will make a distinction between two types of multiples found in the data, which differ both interactionally and sequentially. In one type of multiple (instances of which will henceforth be referred to as "true multiples"), only one speaker is involved in initiating repair; however, more than one repair initiation is required to resolve a problem. It is typical in such instances for the successive repair initiations to occur in order of increasing strength (Schegloff et al., 1977, p. 369), i.e., while the initial repair initiation may be a non-specified repair initiation, the next repair initiation in the multiple will be

'stronger' in terms of identifying the trouble source, i.e., it may be a question word or a partial repeat. This type of multiple often, though not necessarily, only involves two speakers, i.e., the trouble source turn speaker (who, due to the preference for self-repair, is generally also the speaker performing the repair) and the speaker initiating the repair.

The second type of multiple also features more than one repair initiation; however, the multiple repair initiations are issued by different conversation participants and serve a specific purpose – that of affiliation (as opposed to indicating ongoing problems). Hence, these multiples are likely a characteristic of multi-party interactions (Egbert, 1997), i.e., interactions that have more than two participants. These will henceforth be referred to as "affiliative multiples." Egbert (1997, 2004) has described several instances where speakers align with one another along linguistic or regional (e.g., speakers of a particular dialect) lines by issuing successive repair initiations in response to the same trouble source. In the following, I will first briefly discuss some findings relating to true multiples, particularly in light of their relationship to findings discussed in chapters 3 and 4, in order to then discuss differences between the two types of multiples in the context of this study.

However, the analysis of the data revealed that speakers not only engaged in affiliative practices in the repair initiation phase of other-initiated repair sequences, but also in the repair operation, as well as the post-resolution phase. Hence, following the discussion of multiples, the remainder of the chapter will focus on affiliative practices in the overall organization of repair.

5.2. Multiples

5.2.1. True Multiples

In the data, true multiples tend to occur if an original first repair initiation did either not successfully resolve a problem (refer to section 3.3.2 for a discussion of some possible reasons for this occurrence) or was ignored (refer to excerpt (28) for an example). Consider excerpt (8) again:

(8) [Esperanto, Group 1, simplified]

```
01
     Richard:
                 .h du sollst esperanto lernen hehe
                 .h you should esperanto learn hehe
                you should learn esperanto
02
                 (.)
03 \rightarrow Linda:
                hm?
04
   Richard:
                du- du sollst- auch esperanto lernen heh.hh
                you- you should- also esperanto learn heh
                you should also learn esperanto
05 \rightarrow Linda:
                esperanto,
                .h ist die: (.) ääh internal- internaschion:=
06
     Richard:
                .h is the uuh internal- international
                is the
07
                =alisch
                 alish
80
                (0.4)
09
     Linda:
               00 [ h
10
     Richard:
                  [mund heh
                   [mouth heh
                   language
```

It becomes apparent that Linda experiences a problem with Richard's utterance when she first initiates repair on it in line 03. However, her repair initiation is in the form of a non-specified repair initiation, thus not only failing to locate the specific trouble source, but also potentially indicating a problem with hearing or other sequential type of problem. This is, in fact, what Richard appears to understand the nature of the trouble source to be; thus, he simply repeats his original trouble source in line 04 (as discussed in section 4.3.2). However, when Linda again initiates repair in line 05, it is clear that her trouble is not resolved and that there is likely a different type of problem, namely, as it turns out, a lexical problem. Thus, as the first repair operation, a repetition, was unsuccessful in resolving the trouble following Linda's initial repair initiation, the repair sequence has now turned into a true multiple. Linda's second repair initiation, a partial repeat ('esperanto'), is not only a more *specific* type of repair initiation (as discussed in chapter 3), thus identifying the trouble source to Richard specifically as being the word 'esperanto', but also a type of repair initiation associated with a different type of trouble source (namely, lexical) and thus more likely to lead to a different and possibly more successful type of repair operation, given the specific problem experienced by the repair-initiating speaker. In fact, as discussed in section 4.3.2, in response to this altered type of repair initiation, Richard now issues a different type of repair operation, an explanation, in lines 06, 07, and 10, which subsequently successfully resolves Linda's trouble. This succession from a less specific to a more specific repair initiation is very typical of true multiples in the data (in fact, it is observable in all true multiples) and mirrors native speaker behavior (Schegloff et al., 1977).

While true multiples occur in all groups, they appear proportionally more frequently (given the total number of repair sequences in the respective groups) in Groups 1 and 2 (accounting for almost one third of all repair sequences there) than in

Group 3 (where they only account for approximately one tenth of all repair sequences). This could suggest that problems of hearing or understanding may – overall – be more efficiently resolved in Group 3 than in the other groups, further supporting the analysis put forth in chapter 3, namely that Group 3 may use the mechanisms of repair more effectively, i.e., deviating less and thus benefiting more (in terms of efficiency) than other groups from the 'trouble source – repair initiation' relationship discussed in previous chapters. That is, speakers initiating repair in Group 3 may be more consistent in using specific repair initiations to target specific types of problems (for example, partial repeats with lexical trouble sources or nonspecified repair initiations with sequential types of troubles), which may thus enable speakers performing repairs in this group to better orient their repair operations to the specific types of trouble sources indicated by the repair initiating speakers via their choice of form in their repair initiations.⁴⁰ This analysis is supported by evidence from Group 1, where all but one true multiples occur after a non-specified repair initiation was issued in response to a lexical type of problem (see excerpts (8) and (24) for two such examples). 41 This is significant because non-specified repair initiations are more typically associated with sequential types of troubles, thus initially yielding a repetition (which is indeed suitable for resolving sequential types of troubles, but less so for lexical troubles) rather than an explanation of the trouble source, which is a more successful type of repair operation in instances of lexical types of troubles. In contrast to Group 3, where true multiples are rare, Group 1 thus not only features proportionally more such multiples, but the occurrence of almost all of them also appears to be directly related to types of repair initiations issued in response to trouble sources for which they are unsuitable, i.e., instances of deviation from the trouble source – repair initiation relationship discussed in chapters 3 and 4.

However, despite the fact that true multiples are proportionally more common in Groups 1 and 2 than in Group 3, accounting for up to one third of all repair sequences in both groups, the repair mechanism overall nevertheless appears to be efficiently employed by all groups, considering that true multiples requiring more than two repair initiations to resolve are rare in the data across all groups (there are only two instances each in Groups 1 and 2 and only one instance in Group 3). This is noteworthy particularly because troubles have been shown to generally get resolved within two repair initiations or less in native speaker interaction in both German and English (Schegloff et al., 1977, Egbert, 2002), but have sometimes been found to be more complex in interactions involving nonnative speakers (Egbert, 2002). In this respect, the nonnative speakers in this study therefore closely approximate native speakers in their repair behavior. Furthermore, in the data used for this study, almost all of those sequences not resolved within two repair initiations are then subsequently resolved within three – with the exception of two sequences in Group 2, which is thus the only group in the data where true multiples featuring more than three repair initiations occur at all. In relation to Egbert's (2002) findings involving nonnative speakers, however, it is important to note that there are marked differences in the settings in which these conversations took place. Specifically, in contrast to the two speakers in Egbert's study, who did not know each other (i.e., they were strangers),

were engaged in telephone interaction (i.e., there was no face-to-face interaction), and one of whom was a native speaker (i.e., their levels of language competence differed markedly), the speakers within a given group in this study had all known each other for some time (possibly leading to a higher level of comfort with the other speakers), had the same native language (on which they can – and do – rely, if necessary), and were engaged in face-to-face interactions (thereby benefiting from the information contained in nonverbal communication such as mimicry or gestures). All of these factors may well contribute to the overall rarity of longer multiples in the data, emphasizing again the importance the context in which data collection takes place has for understanding the findings. As there are only two examples of such longer and more complex true multiples in the data, it is not possible to determine exactly what causes them; however, there are certain factors that may play a role in this respect. It is first of all perhaps noteworthy that both sequences involve the same repairinitiating speaker, namely, Daphne. It is thus possible that it is not necessarily a particular group (Group 2, in this case) who is generally more prone to exhibit more complex repair sequences, but that it may be particular *speakers* who may be more persistent in requiring their troubles to be resolved before continuing. In addition, in both sequences, the failure of the repair operations to resolve the trouble cannot be attributed to repair initiations that may be inadequate for targeting a particular type of trouble source, as would be the case if there had been a deviation from the trouble source – repair initiation relationship previously discussed. Consider excerpt (9) again in this respect:

```
(9) [Karl, Group 2]
      Rachel:
                    [ich denke dass [karl, (0.2) ist [wie eddie
                          think that [Karl
                                                        is l[ike Eddie
02
                    izzard=
                    Izzard
                    eye-gaze directed at Rachel
03
      Lacy:
                    =ehehe[he
                                [Meg moves eye-gaze to Lacy and nods head
04
                            [eh[ehehe[he
      Meg:
                               [eye-gaze directed at Rachel
05 \rightarrow \text{Steve}:
                               [wer? [wer?
                                who? [who?
06
      Lacy:
                                       [ehehe[he (.) [(cough)hehe
07 \rightarrow Daphne:
                                              [wer ist[
                                              [who is [
                                                        [eye-gaze directed
                                                         at Steve
08 \rightarrow \text{Rachel:}
                                                        [(ka::r[l)
                                                                 [to Rachel
09 \rightarrow \text{Steve}:
                                                                 [karl
                                                                 [karl
                          [to Meg
10
                    is[t [ist
                    is[ [is
                       [to Rachel
                                      [to Steve
11 \rightarrow Daphne:
                       [>wer ist-< [wer ist-=
                       [ who is
                                      [who is
                    to Steve
12 \rightarrow Rachel:
                    =wie: eddie izza[r[d[.
                     like eddie izza[r[d[
                                        [to Rachel, nods head
13
      Lacy:
                                        [>[e[ddie izzard<
                                                  [La. moves eye-gaze to Anne
                                           [to Stev[e
14 \rightarrow Anne:
                                           [w[er [ist eddie izzard
                                           [w[ho [is eddie izzard
                                                        [S. moves eye-gaze from
                                                         Ra. to Da.
                                             [to Rachel [
15 \rightarrow Daphne:
                                             [wer ist [er
                                             [who is [he
```

```
[Lacy quickly moves eye-gaze from Daphne to Rachel
16
      Lacv:
                  [.hh
                  to Lacy
17
      Daphne
                  >er ist-<=
                   he is
                  to Daphne [Da. moves eye-gaze back to Rachel
                 =he's like, ([.) (°karl°) (.) (ein bischchen),
18 \rightarrow Rachel:
                  he's like [
                                       karl
                                                    a little
                       [eye-gaze to Lacy, smiles
19
                  (.) [I think, a little bit
                  to Rachel
20 \rightarrow Daphne:
                  ein musician?
                      musician?
                                 [Lacy moves eye-gaze to Rachel
21
                .h [(.) nein [ähm
     Lacy:
                           no
                                [uhm
                            [Rachel moves eye-gaze to Lacy
                     [to Daph [ne
                                                      [Ra. moves eye-gaze
                                                      back to D.
22 \rightarrow Rachel:
                     [no er[ ist em (.) kom[- komi[sch
                     [no he[ is um fun[- funn[y
```

The trouble source 'I think that Karl is like Eddie Izzard' is originally addressed by both Steve and Daphne by asking 'who' (line 05) or 'who is' (line 07), respectively. These repair initiations are in fact very specific in their reference to the trouble source, but, as there are two person references in the trouble source, they are also arbitrary and it is unclear whom Steve and Daphne are asking about, Karl or Eddie Izzard. It is also unclear whether there is a sequential or hearing-related problem or whether it may be content-related. It appears that Rachel not only interprets the trouble source as being hearing-related in nature, but also the problematic person reference to be 'karl' rather than 'eddie izzard' and therefore issues a repetition of that name (line 08). Thus, this sequence initially turns into a multiple not because the repair initiations were necessarily inadequate given the trouble source, but rather

because they were arbitrary. Steve next issues a partial repeat (lines 09-10) of the trouble source, with Daphne simply repeating her initial repair initiation again (line 11). Particularly Steve's turn format in lines 09-10 ('karl is is') may in fact strengthen Rachel's impression that the trouble source is hearing-related because Steve begins to repeat her initial statement but cuts off half way, thus inviting her to complete the remainder of the statement and suggesting that he simply may not have heard it in its entirety. Thus, Rachel's repair operation in line 12 is again very much oriented to the repair initiations issued to her. These, however, may still not be specific enough, given the ambiguity of the trouble source. This becomes evident in lines 14 and 15, when both Anne, who now enters the sequence, and Daphne, respectively, become very specific in their repair initiations, asking 'Who is Eddie Izzard' and thereby clearly spelling out the trouble source and its nature to Rachel. This is, however, where an actual misunderstanding on Rachel's part occurs. Although it is now clear that the trouble source consists of the fact that some conversation participants do not know who Eddie Izzard is, Rachel nevertheless essentially repeats her original statement again (lines 18-19), but does so in English, presumably to make it more intelligible. Considering that it is clear that the original statement was in fact heard and understood by Daphne and the others, it is not surprising that this does not resolve the trouble, as it fails to explain who Eddie Izzard is. It is only after Daphne's final repair initiation, a candidate understanding (line 20), that Rachel appears to understand what constitutes the trouble and, in response, issues an explanation of the trouble source. Thus, while the original problem in this

multiple was that the repair initiations may have been arbitrary or not specific enough, though not that they were inadequate vis-à-vis the type of trouble source, the problem later becomes that the repair operation speaker misinterprets the repair initiations, although they are, at this point, very specific in regard to the trouble source. Thus, while the responsibility for sequences turning into multiples may in fact often lie with the repair initiation speaker, this need not necessarily be the case. There are other factors, e.g., the repair operation speaker, that may play a role as well. Thus, although deviations from the trouble source – repair initiation relationship clearly account for many of the true multiples in the data, there are factors (or combinations thereof) beyond such deviations that may lead to true multiples, particularly longer and more extensive ones.

5.2.2. Affiliative Multiples

In contrast to true multiples, affiliative multiples do not arise from ongoing unresolved troubles (i.e., troubles that remain unresolved after an initial repair initiation), but rather appear to be an interactional resource for interactants to align themselves with other conversation participants, a phenomenon also found by Egbert in multi-party interactions (1997, 2004). While – akin to true multiples – affiliative multiples can be found in all groups, they – unlike true multiples – appear to be particularly prevalent in Group 3 and are rare in Groups 1 and 2: While there is only one affiliative multiple in Group 1 and two in Group 2, Group 3 features nine examples of such multiples. For an example of an affiliative multiple, consider

excerpt (27) again, which occurs during a conversation about movies the students have seen:

(27) [Daylight, Group 3, simplified]

```
[Monica gestures air quotes]
01
     Monica:
                  ja ANDERE EM [ende ders welts, (0.8) filme war
                  yes other um [end of the world
                                                           films
02
                  besser. (0.4) als-
                  were better
                                 than
                  [to Monica
03
     Adam:
                  [deep impa[ct?
                                                               [M.& K.
                                                            turn to N.
                             [to Adam
                                                [points at Adam [
04
     Monica:
                             [armaged[don.=das[ w[ar besse:[r,
                             [armaged[don tha[t [was bette[r
                                      [to Zack
05
     Clint:
                                      [jaa. ich h[abe das (gesehen
                                      [yes I
                                                 h[ave that (seen
                                      [Yes, I hav[e seen that.
                                                  [to Adam
06
     Nick:
                                                  [und daylight,
                                                  [and daylight
07
     Clint:
                  da:s,)
                  that)
                  [to Nick
08 \rightarrow Adam:
                  [hu:[h?
09
      Zack:
                      [OH JA JA (.) [ja (.) ich habe=
                                     [yes
                                               Ι
                      [oh yes yes
                                                   have
10 \rightarrow Kacey:
                                      [und was?
                                      [and what?
                  [to Kacey
11
     Nick:
                  [=daylight
```

Monica, Adam, Clint, and Zack are initially engaged in an exchange about the films *Armageddon* and *Deep Impact* (lines 01 to 05). While Monica's utterance in line 04 is a response to Adam's utterance in line 03, Clint's utterance in lines 05 and 07 is aimed at Zack; however, both utterances occur in overlap. Furthermore, during

Monica's utterance in line 04, both Adam and Kacey are focusing their attention on Monica, as evidenced by their eye-gaze directed at her, and it is in this environment that Nick suggests yet another movie title ('and daylight') in line 06. His utterance, i.e., the eventual trouble source, thus overlaps with both Monica's and Clint's turns and falls into an environment in which none of the attention is focused on him and all other conversation participants are engaged in a specific exchange (Monica and Clint are both also speaking, while Zack, Kacey, and Adam are orienting to their respective talk). While Nick's eye-gaze (line 06) suggests that his utterance is specifically aimed at Adam, Adam's attention, meanwhile, appears to be focused on Monica. However, his non-specified repair initiation ('huh?', line 08) that follows Nick's utterance suggests that he, in fact, not only heard that Nick said something, but is also aware of the fact that it was specifically aimed at him, but that he perhaps did not hear what was said specifically, i.e., a sequential or hearing-related problem has occurred. At almost the same time as Adam's repair initiation, Zack also responds to Nick's statement (line 09), which he, in contrast to Adam, appears to have understood as he is able to comment on it ('oh yes yes'). However, Nick subsequently neither appears to orient to Zack's utterance (although he may have heard it), nor does he attempt to repair Adam's problem with his utterance. It is at this point that Kacey issues a second repair initiation ('and what?', line 10) on the same trouble source Adam already initiated repair on in line 08. While her repair initiation (a partial repeat plus question word) is more specific, thus locating the trouble source more specifically, it, at the same time, aligns Kacey with Adam by showing that she is experiencing

trouble with Nick's turn as well (Egbert, 1997). Kacey and Adam are thus in a 'group' of speakers who experience a problem with the same trouble source. The fact that Kacey chooses a repair initiation that is more specific than Adam's initial one, thus following the pattern of increasing specificity typical of true multiples, may serve to strengthen the affiliation with Adam. By following this pattern, Kacey not only displays her affiliation with Adam (which, however, a repair initiation at the same level of specificity could also accomplish), but also creates in essence a true multiple, thereby taking an active part in advancing the trouble resolution. Kacey and Adam thus not only work on resolving the same trouble, but also do so in a form that mimics one often attributed to a single speaker; they can thus be seen as acting as one repair-initiating 'entity'.

This type of affiliative multiple, featuring increasing specificity in the selection of repair initiations, appears to be particularly common in sequences in which the initial repair initiation is rather unspecific (particularly, if the initial repair initiation is a non-specified repair initiation), as in excerpt (27) above. This makes sense, as an additional, increasingly specific, repair initiation can then not only display affiliation, but also provide important additional information to the trouble source turn speaker on the location and nature of the specific trouble source and thus contribute to the resolution of the trouble.

However, there are also instances in the data where affiliative multiples featuring repair initiations of equal specificity occur (see, for example, excerpts [18] or [9]). Thus, while true multiples always exhibit increasing specificity in the repair

multiples, the latter do not appear to adhere to it as strictly as true multiples do. This may, in part, be due to the fact that in a true multiple, such action helps to advance the resolution of the trouble, while in affiliative multiples, contributing to a speedy resolution of the problem may not necessarily be the primary, albeit an important, purpose of a repair initiation. However, affiliative multiples featuring equal specificity tend to occur in a very specific environment, which may further help explain why increasing specificity is not as common in affiliative multiples as it is in true multiples.

Specifically, in contrast to affiliative multiples displaying increasing specificity in the selection of repair initiations, which tend to occur if the initial repair initiation is rather unspecific, affiliative multiples containing repair initiations of equal specificity more commonly occur when the highest possible level of specificity has already been reached. Reconsider, for example, excerpt (11) in this light:

(11) [Lass uns, Group 2, simplified]

```
0.4
     Rachel:
                lass- (.) [lass uns lesen lass uns (si[tz-)
                let-
                       [let us read let us si[t
05 \rightarrow Daphne:
                           [was ist lass uns
                           [what is let us?
                                                        Γ
06
     Meq:
                                                        [ja,ja,
                                                        [yes yes
07
                lass uns
                let
                      us
08
     Rachel:
                jа
                yes
09 \rightarrow Anne:
                was bedeutet la[ss uns
                what means le[ us
                what does let u[s mean?
```

10 Rachel: [let's

In this excerpt, both Daphne (line 05) and Anne (line 09) use the same means of initiating repair (an explicit question). At the point in the conversation where Daphne issues this explicit question ('what is let us?'), she is already involved in a true multiple (refer to section 3.3.2.4, page 101 for a discussion of the extended sequence), with the explicit question following the tendency for increasing specificity in such true multiples. When Anne issues her repair initiation shortly thereafter (line 09), she chooses the same type of repair initiation as Daphne, thus not contributing anything new towards the resolution of the trouble, but thereby clearly emphasizing the affiliative nature of the multiple. In fact, however, it is likely that the only more specific type of repair initiation available (a candidate understanding) would not have been possible in this sequence. Specifically, the trouble source is of a lexical nature and involves the meaning of the expression 'lass uns' ('let us'). Since Daphne and Anne are inquiring precisely about the meaning of this expression, a candidate understanding (which would require supplying a possible understanding, i.e., a meaning, for this expression) might not be possible; the explicit questions may therefore in fact be the most specific type of repair initiation possible. Thus, even if Anne had wanted to increase the level of specificity in her repair initiation and thereby contribute to the advancement of a resolution of the trouble source, it may not have been possible. This is very typical of the examples in the data where affiliative repair initiations are of the same strength: At the time the affiliative repair initiation occurs, the highest level of specificity possible in a given situation appears to already

have been reached. It makes sense then that the pattern of increasing specificity is not as strong in affiliative multiples as it is in true multiples: There are instances where it is not possible to follow that pattern. However, it is noteworthy that although their repair initiations do not contribute anything new towards a resolution of the trouble, the affiliating speakers in these sequences nevertheless choose to issue a repair initiation. Egbert (2002) points out that issuing such additional repair initiations actually delays the resolution of the trouble and may thus be uneconomical in the organization of repair, which is aimed at resolving troubles as quickly as possible (p. 162). It is likely, then, that the primary purpose of these repair initiations may be that of affiliation, rather than resolving the trouble or doing so quickly. Affiliation, therefore, appears to be an important factor in these conversations and will be discussed in some more detail in the following.

5.3. Affiliation

Repair initiations in affiliative multiples are, in fact, not the only place in a repair sequence where affiliative practices can be observed in the data. Specifically, speakers involved in the repair operation part of the sequence can also be observed exhibiting similar affiliative behavior. Consider excerpt (9) again in this respect:

(9) [Karl, Group 2]

a⁴² Rachel: kennt ihr eddie izzard know you eddie izzard Do you know Eddie Izzard?

[Lacy nods head b Lacy: .h [jaa [yes

```
Meg directs eye-gaze at Lacy
                   [Meg shakes head
                   [°nein°
00
      Meq:
                   [ no
                                                          [Ra. moves eye-
                                                              gaze to Da.
                   [eye-gaze at Lacy [Meg directs eye-gaze[at Rachel
01
      Rachel:
                   [ich denke dass [karl, (0.2) ist [wie eddie
                   \lceil I
                         think that [Karl
                                                     is l[ike Eddie
02
                   izzard=
                   Izzard
                   eye-gaze directed at Rachel
03
      Lacy:
                   =ehehe[he
                              [Meg moves eye-gaze to Lacy and nods head
04
      Meg:
                          [eh[ehehe[he
                              [eye-gaze directed at Rachel
05
      Steve:
                              [wer? [wer?
                               who? [who?
06
      Lacy:
                                     [ehehe[he (.) [(cough)hehe
07
      Daphne:
                                            [wer ist[
                                            [who is [
                                                     [eye-gaze directed
                                                       at Steve
0.8
      Rachel:
                                                     [(ka::r[l)
                                                              [to Rachel
09
      Steve:
                                                              [karl
                                                              [karl
                         [to Meg
10
                   is[t [ist
                   is[ [is
                      [to Rachel
                                    [to Steve
11
      Daphne:
                      [>wer ist-< [wer ist-=
                      [ who is
                                    [who is
                   to Steve
12 \rightarrow Rachel:
                   =wie: eddie izza[r[d[.
                    like eddie izza[r[d[
                                      [to Rachel, nods head
                                      [>[e[ddie izzard<</pre>
13 \rightarrow Lacy:
                                               [La. moves eye-gaze to Anne
                                        [to Lacy[
14
      Anne:
                                        [w[er [ist eddie izzard
                                        [w[ho [is eddie izzard
```

```
[S. moves eye-gaze from
                                                         Ra. to Da.
                                             [to Rachel [
15
      Daphne:
                                             [wer <u>ist</u> [er
                                             [who is [he
                    [Lacy quickly moves eye-gaze from Daphne to Rachel
16 \rightarrow Lacy:
                    [.hh
                    to Lacy
17
      Daphne
                    >er ist-<=
                     he is
                                   [Da. moves eye-gaze back to Rachel
                    to Daphne
18 \rightarrow Rachel:
                    =he's like, ([.) (^{\circ}karl^{\circ}) (.) (ein bischchen),
                     he's like
                                   [
                                           karl
                                                           a little
                         [eye-gaze to Lacy, smiles
19
                    (.) [I think, a little bit
                    to Rachel
20
      Daphne:
                    ein musician?
                        musician?
                                    [Lacy moves eye-gaze to Rachel
21 \rightarrow Lacy:
                    .h [(.) nein [ähm
                             no
                                    [uhm
                               [Rachel moves eye-gaze to Lacy
                        [to Daph[ne
                                                           [Ra. moves eye-gaze
                                                            back to D.
22 \rightarrow Rachel:
                        [no er[ ist em (.) kom[- komi[sch
                        [no he[ is um
                                               fun[- funn[y
                                                   [to Rachel
                                                   [k- komi- komisch
23 \rightarrow Lacy:
                                                   [f-fun-funny
                        [to D., nods
24
                    kom[isch j[a
                    fun[ny ye[s
25 \rightarrow Rachel:
                                [ja
                    to Rachel
26
      Meg:
                    aha=
                    to Rachel, Anne moves eye-gaze to Daphne
27
      Daphne:
                    =hah=
                    to Steve and Anne, Anne moves eye-gaze to Meg
28
                    =hahaha[ hah[a
      Meg:
                             [to Meg, Meg moves eye-gaze to Lacy
29
                             [haha[ha
      Lacy:
                                   [to Meg[moves eye-gaze to Lacy
30
      Anne:
                                   [ehe:h[
```

This repair sequence begins with Rachel inquiring whether the other interactants know who Eddie Izzard (a comedian) is (line a; see Note 42 for information on the numbering of lines in this excerpt). Although Lacy is the only one who answers this question in the affirmative (line b) and Meg explicitly denies such knowledge (line 00), Rachel nevertheless subsequently begins to tell a joke involving this person (Eddie Izzard): She compares the group's teacher Karl to the comedian (lines 01 and 02). While Lacy, who knows who Eddie Izzard is, is able to provide the preferred response to this joke (i.e., laughter) in lines 03 and 06 (and, in line 04, Meg does so as well, despite the fact that she had denied knowledge of Eddie Izzard), both Steve and Daphne are not able to provide this preferred response as they appear to not know who Eddie Izzard is. Thus, they subsequently begin an insertion sequence by initiating repair on Rachel's utterance (lines 05 and 07, respectively), thereby engaging in an affiliative multiple. After Rachel's first attempt at resolving the trouble in line 08, both Steve and Daphne issue additional repair initiations (lines 09-10 and 11, respectively), thereby continuing their affiliation. This continued affiliation is particularly evident not only in the fact that Daphne issues a second affiliative repair initiation at all, but also in the fact that while the first part of her repair initiation in directed at Rachel (the trouble source turn speaker), during the second part of her repair initiation ('who is'), she specifically directs her eye-gaze at Steve, thereby seeking to establish a connection with Steve and emphasizing her affiliation with him. It is likely that the shape of Steve's partial repeat ('karl is is') in lines 09-10 leads Rachel to issue the repair operation she attempts next ('like eddie

izzard', line 12), as it essentially completes Steve's partial repeat. It is here (in line 13), that Lacy can now be observed affiliating with *Rachel* by issuing another repair operation, just as Daphne has done with Steve in the repair initiation part(s) of the repair sequence. In a move again similar to Daphne's affiliative behavior in line 11, Lacy does not direct her eye-gaze at a repair-initiating speaker during her repair operation, as may be expected, but instead directs it at Rachel, thereby clearly affiliating with her and further emphasizing this affiliation by simultaneously nodding her head. This suggests that Lacy's primary objective may not be performing the repair operation per se (which is perhaps not unexpected, as both Steve's and Daphne's repair initiations were specifically directed at Rachel), but rather to affiliate with Rachel. It is perhaps not surprising that it is Lacy who affiliates with Rachel here as she was the only one in the group who, in line b, had previously indicated that she, in fact, knows who Eddie Izzard is. This affiliation between Rachel and Lacy is subsequently maintained up to the end of the repair sequence. It can again be observed after two additional repair initiations by Anne and Daphne (lines 14 and 15, respectively), when Lacy appears to want to begin a repair operation in line 16 (she takes a deep in-breath), but then yields the floor to another repair operation by Rachel (in lines 18 and 19), the original trouble source turn and thus preferred repair operation speaker. At the end of this repair operation, Rachel withdraws her eye-gaze from Daphne and directs it at Lacy, thereby seeking to establish a connection with (and possibly receive affirmation from) Lacy. This appears to succeed, as Lacy, mirroring Rachel, smiles when Rachel makes eye contact with her. Thus, both repair

operation speakers in this sequence actively engage in affiliative practices with the other.

This affiliation continues in their final repair operation in lines 21-25, where, following Daphne's next and final repair initiation in line 20, the trouble gets resolved successfully. In line 21, Lacy first appears to want to take the floor (she again takes an audible in-breath), but before she can speak, Rachel begins to speak as well (line 22). While both Lacy's and Rachel's repair operations are initially aimed at Daphne, Rachel directs her gaze at Lacy after her first word ('no'), who subsequently directs her eye-gaze at Rachel, thereby again establishing eye contact between the two repair operation speakers. This eye contact is maintained throughout the subsequent collaborative production of the word 'komisch' in lines 22 to 24 and it is only after the word has been found that Rachel withdraws her eye-gaze from Lacy and directs it back to Daphne, with Lacy subsequently mirroring that action. Despite their withdrawn (from one another) eye-gaze, however, Lacy and Rachel nevertheless continue to maintain their alignment, as evident in their affirmation of their word choice ('yes') in lines 24 and 25, respectively.

The affiliative behavior exhibited in both the repair initiation as well as the repair operation phases of this sequence suggests that during the repair sequence, the group temporarily splits into two groups: Daphne, Steve, and Anne all affiliate with one another at one point or other during the repair initiations issued during the sequence, while Rachel and Lacy in turn continue to affiliate with one another at various points during the repair operations in the sequence, to the point where they

even collaboratively produce the final – successful – repair operation. Following this resolution of the trouble, however, more affiliative work can be observed in the sequence. This begins in line 26, when Meg begins to laugh, followed shortly thereafter by Daphne in line 27. This laughter may be significant in a number of different ways. First, laughter in general can serve as a marker of affiliation between speakers (Ellis, 1997, p. 149) and may thus be an affiliative action in itself. However, this particular laughter most likely also refers back to the last utterance before the problem occurred (which was in lines 01 and 02), i.e., the beginning of Rachel's joke. As, at this point, the trouble is resolved, Meg and Daphne can now respond to the content of Rachel's original utterance (i.e., the trouble source) and they do so by laughing (notably, their eye-gaze is directed at Rachel during this action), i.e., by providing the preferred response to the telling of a joke. Thus, by issuing laughter now, Meg and Daphne not only affiliate with one another, but also thereby reaffiliate with Rachel and Lacy. Thus, after a break in the group appears to have occurred during the repair sequence, the group members now become reaffiliated with one another. This may be why not only Meg and Daphne, but also Lacy and Anne subsequently join in the laughter (lines 29 and 30, respectively). The group now appears to have reestablished a sense of mutual understanding that encompasses the whole group. This is, in fact, very typical behavior across all groups in the data. It appears that during a repair sequence, this orientation towards mutual understanding can become disrupted; however, after a trouble has been resolved, group members subsequently appear to work towards alleviating this disruption and reestablishing the

group cohesion. In the above excerpt, this reestablished group cohesion is indicated by the completion of the original sequence (i.e., the telling of a joke), which is achieved by the collective laughter at the end of the sequence.

In the following, I will discuss some examples of how this break in group disruption occurs and how speakers subsequently use means of affiliation to reaffiliate with the group and reestablish mutual understanding.

5.3.1. The Repair Initiation

Repair initiations often, though not always, have a disaffiliative effect on group cohesion. Consider, for example, excerpt (25). In this sequence, the students are engaged in a conversation about a book they have recently read in their German class:

(25) [Book, Group 2, simplified]

```
es war[ trist? ja?
01
      Rachel:
                  it was[ sad? yes?
02
                  (0.5)
03
     Lacy:
                  mh[m
                  mh[m
04
     Daphne:
                     [ja
                    [yes
05
     Rachel: und deprimiert
                  and depressed
06
     Lacy:
                  [mmhm
                  [ mmhm
07 \rightarrow Daphne:
                  [deprimiert?
                  [depressed?
08
     Rachel:
                  [it's depres[sing heh
09
                  [mhm
     Lacy:
                  \lceil mhm \rceil
                                [
```

10 Daphne: [oooh (.) ja [oooh yes

In lines 01 and 05, Rachel states her assessment of the book. While both Lacy (line 03) and Daphne (line 04) agree with Rachel's initial assessment ('it was sad'), only Lacy (line 06) agrees with her second statement ('and depressed'). Daphne, on the other hand, appears to experience a problem with the word 'deprimiert' and thus initiates repair on it in line 07 with a partial repeat. While all three speakers had previously aligned with one another by agreeing on their opinion about this book (lines 01-04), only Rachel and Lacy maintain this alignment after line 05. In contrast, Daphne's repair initiation indicates that, due to some trouble she is experiencing with understanding the utterance, she is no longer able to continue this alignment. While this does not necessarily constitute a disagreement with Rachel and Lacy in regard to the content of the utterance on Daphne's part, a break in their previously established alignment nevertheless occurs. Thus, after Rachel repairs the trouble in line 08, Daphne issues a change-of-state token in line 10, thereby indicating that her trouble is resolved, and immediately follows it with her expressed agreement ('yes') with Rachel's statement from line 05, thereby seeking to reaffiliate with Rachel and Lacy and reestablish mutual understanding.

It is interesting to note that despite the disruptive nature of the repair initiation, there is nothing in this sequence that indicates that there may have been any interactional pressure on Daphne to initiate this repair; instead, it is Daphne who *chooses* to seek to repair her problem. It is clear to Daphne as the speaker experiencing the trouble that there *is* a problem and that a disruption in the mutual

understanding in the group has occurred, but before she initiates repair on the troublesome lexical item 'depressed', no one else in the group is likely aware of this disruption. In fact, Daphne's repair initiation, despite being the overt marker of trouble and therefore group disruption, is actually Daphne's first step to reestablish mutual understanding and eventually reaffiliate with the group.⁴³ Thus, the disruption in mutual understanding actually occurs before it is made overt by way of initiating repair. Clearly, then, it is also possible for the disruption to occur but remain hidden; however, these instances are difficult – or impossible – to determine (Egbert, 2002, p. 161). In fact, there are several examples in the data where problems with understanding appear to have occurred but were *not* attended to at all, or not until much later. This may not be surprising as repair initiations can disrupt group cohesion (see above) and speakers may instead wish to maintain group cohesion by remaining silent, as items that remain "unchallenged, ... represent... a collective consensus" (Donato, 1994, p. 50). Consider the following excerpt, which is an example of trouble that occurred, but was not attended to by the speaker experiencing the trouble (occasionally, it was possible to identify such instances in the data):

(33) [Juli, Group 3, simplified]

```
01
     Monica:
               vielleicht für: em (0.2) vierten:: (.) juli,
               maybe for um
                                       fourth
                                                     july
02
               (1.2)
03
     Kacey:
               jaa[a
               yes[
04
     Clint:
                   [vierten?
                  [fourth
05
     Clint:
               oh.
06
                (1.4)
```

```
07
     Clint: ja.=
                 yes
08
     Kacey:
                 =ja
                 yes
               °independence day,°
09
     Monica:
10 \rightarrow Adam:
                 OOOH ok.
11
                 (0.2)
12 → Adam:
                 ich verstehe (.) jetzt
                     understand now
```

This excerpt occurs during a conversation in Group 3 about the advantages of a short trip to the US during the group's study abroad experience in Germany. In line 01, Monica suggests a specific time for such a trip ('maybe for [the] fourth [of] july'). While Kacey agrees with this statement in line 03 ('yes'), Clint indicates that he has a problem with it (line 04) by initiating repair on it through a partial repeat, thus indicating specifically that his problem is with the word 'vierten' (fourth). Almost immediately, however, he then indicates the resolution of that problem (line 05) when he utters a change-of-state token, 'oh', followed by an expressed agreement with Monica's statement in line 07. At this point, then, the trouble appears to be resolved and mutual understanding reestablished. However, in line 09, Monica elaborates on her original statement (which is possibly a belated repair operation in response to Clint's repair initiation) by pointing out that that particular day is also referred to as Independence Day in the US, in response to which Adam now issues a change-ofstate token ('oooh'), followed by 'ok' (line 10). While this signals his understanding of the trouble source, this is the first indication he gives that there may have been a different state, i.e., non-understanding, before. This is stressed again in line 12, when he states 'I understand now'. This indicates that he understands something now that he did not understand before: A problem with understanding appears to have occurred. However, he did not indicate such a problem at any point until after it has already been resolved. This illustrates that even though one or more of the parties involved in a conversation may be experiencing trouble, other-initiations are often not necessary for the conversation in a multi-speaker environment to continue and it is unknown how many trouble sources remain unrepaired in the data. There may be significantly more problems with hearing or understanding in the various groups than are actually attended to; thus, most of the repair sequences that are available for analysis are those instances where speakers *choose* to make a trouble source overt. It is likely that "sometimes the nonnative remains silent, hoping to mask his nonunderstanding" (Ochs, 1987, p. 306, as cited in Egbert, 2002, p. 201), which is possible because whatever remains "unchallenged" (e.g., via a repair initiation) can be seen as "representing a collective consensus" in the group (Donato, 1994, p. 50). This may help explain why there are more affiliative multiples and more otherinitiations of repair in general in Group 3: Due to the amount of time they spent together during the study abroad program, they may know each other very well and may thus be more comfortable with initiating repair (i.e., they may not be as concerned with masking their problems). This may be important because Group 3, despite their higher number of other-initiations of repair, may not in fact experience more troubles in hearing or understanding than the other groups. Rather, the repair sequences in the data are representations of instances where speakers choose to make

a problem known; therefore, the number of repair initiations in a given group may be more a reflection of speakers' willingness to do so, rather than necessarily represent the actual prevalence of certain types of problems.

However, there are a few instances in the data where other-initiations *are* necessary to continue the conversation and where, as a consequence, there is interactional pressure on speakers to initiate repair and thus overtly mark a problem in hearing or understanding. An example of this was presented in excerpt (24):

(24) [Lesen, Group 1]

```
[to Alison
10 \rightarrow Marc:
                  [hast du [gelesen?
                  have you[read?
11
     Linda:
                            [that's the one my roomma[te was
12 \rightarrow Alison:
                                                       [hmmm?
13 Linda:
                 watching
                  [to Alison
14 \rightarrow Marc:
                  [hast du gelesen?
                  [have you read?
15
                  (1)
16 \rightarrow Alison:
                 gelese[n?
                  read [
17
     Linda:
                        [gelesen emm
                        [read
                                  um
18
                  (0.2)
19
     Alison:
                (I don't kn[ow)
20
     Linda:
                              [lesen
                              [to read
21
     Marc:
                              [lesen
                              [to read
22
     Alison:
                 oh JA JA ich äh (0.7) ich lese (.) zwei
                  oh yes yes I uh I read
23
                 büche(nt)
                  books
```

This excerpt occurs during a conversation in Group 1 about how Alison occupied herself during a recent illness of hers. In this segment, the trouble source with which Alison is experiencing problems is contained in an utterance that is a question ('have you read?') directed at her (lines 10 and 14). As a question constitutes the first pair part of the question-answer adjacency pair, its occurrence makes the second pair part relevant, thereby putting Alison in a position where she has to provide the answer. However, as she appears to not have heard or understood the utterance, she has to initiate repair (lines 12 and 16), thus beginning an insertion sequence, in order to fulfill this designated role and answer the question. However, this interactional pressure to initiate repair is only evident in a total of 5 repair sequences in the data; in the majority of other-initiated repair sequences in the data, no such necessity is evident. This circumstance emphasizes the significance of the larger number of affiliative multiples found in Group 3 vis-à-vis the other groups and supports the possibility that speakers in that group may be more comfortable or willing to initiate repair, as the majority of such repair initiations occur without any overt necessity to do so.

5.3.2. The Repair Operation and Reaffiliation

After an other-initiation has been issued and the orientation to mutual understanding in the group has been disrupted by the repair-initiating speaker (as discussed above), these speakers almost always engage in some interactional

reaffiliation work in order to reestablish the group orientation. For an example of such reaffiliation work, consider excerpt (8) again:

(8) [Esperanto, Group 1, simplified]

```
01
     Richard:
                 .h du sollst esperanto lernen hehe
                 .h you should esperanto learn hehe
                 you should learn esperanto
02
                 (.)
03
     Linda:
                hm?
04
     Richard:
                 du- du sollst- auch esperanto lernen heh.hh
                you- you should- also esperanto learn heh
                you should also learn esperanto
05
     Linda:
                esperanto,
06
     Richard:
                 .h ist die: (.) ääh internal-
                 .h is the uuh internal-
                 is the international
07
                 internaschion:alisch
                 internationalish
08
                 (0.4)
09 \rightarrow Linda:
                00 [ h
10
     Richard:
                   [mund heh
                   [mouth heh
                    language
11 \rightarrow Linda:
                mheh .h ja
                 mheh
                        yes
```

After Richard's initial statement in line 01, Linda first initiates repair on the item with a non-specified repair initiation in line 03 and again with a partial repeat in line 05, thus indicating a continued problem with understanding on her part. In response, Richard begins a repair operation, an explanation, in line 06 (which he eventually finishes in line 10) and Linda subsequently issues a change-of-state token ('ooh') in line 09. This suggests that a change away from her previous state, i.e., non-understanding, and towards a specific new state, i.e., that of understanding, has taken

place. She subsequently begins her next turn in line 11 with a short laugh. This is significant because it was also the last action by Richard in line 10 and Linda may thus seek to affiliate with Richard on the content level. However, as previously mentioned, laughter may serve a different purpose here, as well. Not only can it generally serve as a marker of affiliation between speakers (Ellis, 1997, p. 149), but it is also frequently associated with a non serious mode (Schegloff, 1987) and may thus also be an attempt by Linda to distance herself from her previous (disaffiliative because disruptive) action (Norrick, 1993, as cited in Ellis, 1997, p. 149). Thus, Linda's laughter in line 11 may be significant in a number of ways, all of which, however, serve the same purpose – that of reaffiliating herself with Richard. In addition, Linda subsequently issues an agreement with Richard ('yes', line 11), thus overtly referring back to his original statement and, by establishing this connection to the last action before the repair initiation, reestablishing mutual understanding and thus group cohesion.

While it is, as in the excerpts discussed above, most often the repair initiating speaker who engages in interactional affiliative work, there are also cases where other conversation participants, for example the *trouble source* speaker, can be observed doing such interactional reaffiliation work during a repair sequence, thus showing the strong orientation in the groups towards mutual understanding and group cohesion. Consider the following excerpt:

(34) [Office, Group 2]

```
to Daphne
01 \rightarrow Steve:
                  nein em weil (.) die deutsch (.) center (.)
                        um because the german
                  No, because the (German Department's) office
02
                  nicht (.) öffnet (.) jetz[t
                  not
                              opens
                                           now [
                  is not open now.
                                    [to Steve
03
      Daphne:
                                    [waas? (.) deutschcenter?
                                    [what?
                                              germancenter?
                  to Daphne
04 \rightarrow \text{Steve}:
                  ja=
                  yes
                   to Steve
05
                  =ha[hhh h[aha
      Meg:
                      [to Meg[ [Meg moves eye-gaze to Lacy
06
      Lacy:
                      [hahah[a[haha
                             [to Steve [Daphne moves eye-gaze to Rachel
07
      Daphne:
                             [das [bü[ro?
                             [the [of[fice?
                                   [to Daphne [Me. moves eye-gaze to Da.
0.8
      Rachel:
                                   [das bü[r[o
                                   [the of[f[ice
                                                     [Da. moves gaze to St.
                                           [to Rachel [and nods head
                                           [bür[o? [(.) ok
09
      Daphne:
                                           [off[ice[?
                                                          ok
                                                [to Daphne
10
      Meg:
                                                [büro. .h
                                                [office.
                  to Steve
11
      Daphne:
                  aaa[ah
                               [to Meg and Rachel
                      [to Daphn [e [smiles
                                                [begins to cast gaze down
12 \rightarrow Steve:
                      [d- ja [ja [(.) ni- ni[cht offen jetzt
                      [d- yes yes
                                        no- no[t
                                                     open now
```

After Steve's utterance in lines 01 and 02, where he explains why he has not been able to take a specific German exam, Daphne other-initiates repair (line 03) on a part of the utterance with a non-specified repair initiation and a partial repeat ('what?

german center?). This signals that Daphne experiences trouble with the word 'deutscheenter'. Steve appears to understand her repair initiation to be a comprehension check and thus responds simply with an acknowledgment ('ja') in line 04. This, however, does not resolve Daphne's problem, who therefore subsequently issues another repair initiation, specifically, a candidate understanding ('the office?') in line 07. While her first repair initiation was directed at Steve, during this second repair initiation, Daphne now moves her eye-gaze to Rachel, thereby effectively selecting Rachel as the next-turn speaker expected to provide the repair operation and possibly signaling a withdrawal of that expectation from Steve. In line 08, Rachel provides a repair operation (a repetition), which is not only ratified by Meg in line 10, who thus affiliates with Rachel on her choice of this lexical item, but which also succeeds in resolving Daphne's trouble, as indicated by her acknowledgement token in line 11 ('aaah'). While Daphne's trouble is resolved at this point, Steve – the original trouble source turn speaker – now enters the sequence again (line 12) and engages in affiliative work. Specifically, he first acknowledges the lexical item chosen, thus affiliating with Rachel, Meg, and Daphne, and then repeats his original utterance. Considering the orientation towards mutual understanding observable in all groups, it is perhaps not unexpected that Steve now engages in this active reaffiliation work. He was the original trouble source turn speaker in the sequence and thus in a preferential position to perform the repair operation; in fact, he is expected to perform this repair operation. He was, however, not able to successfully fulfill this role and resolve Daphne's trouble. Moreover, it has become evident at this

point in the sequence that not only did his repair operation not resolve Daphne's trouble, it was also a problem with his speaking (namely, using an incorrect word that the other group member were not familiar with), rather than with Daphne's hearing or understanding, that triggered the repair sequence. This may explain why Steve engages in this reaffiliation work in line 12 in order to reestablish his connection to the group. He accomplishes this by first directing his eye-gaze at Daphne, but subsequently also sweeping his eye-gaze across Meg and Rachel (notably, the two other speakers involved in the repair sequence), thus addressing specifically the speakers who have agreed upon a word different from the one he had used. He also smiles after he ratifies the item, which may be an action similar to that of laughter (see above). Thus, even though Steve was not the repair-initiating speaker, he was the person who 'caused' Daphne's problem, thus putting him in a position where it became necessary for him to reaffiliate with the group. 44 This emphasizes the group orientation towards mutual understanding and group cohesion, as it extends not only to speakers initiating repair, but also to other speakers who, through some action, temporarily disrupt this group orientation.

5.4. Summary and Discussion

While chapters 3 and 4 focused primarily on specific parts of an other-initiated repair sequence, i.e., elements of its structure, this chapter focused more on interactional aspects, most notably affiliation. Affiliative practices were observed at various sequential points in the repair sequence, specifically, in the repair initiation

part, in the repair operation part, as well as after the resolution of the trouble. In the following, I will briefly review and discuss the occurrence of affiliation in each of these sequential environments.

Affiliation that occurred in the repair initiation part of the repair sequences usually occurred in the form of what I referred to as affiliative multiples in the context of this project. However, these affiliative multiples are different from what is more generally known in CA as multiples, the latter of which I therefore refer to as true multiples. Specifically, while both true multiples and affiliative multiples are here defined as repair sequences that feature more than one repair initiation before the trouble gets resolved, they are otherwise different in a number of ways and are distributed across the groups in the data very differently. In the following, I will briefly summarize important points on both types of multiples, before discussing affiliation in other phases of the repair sequence in more detail. True multiples, on the one hand, generally involve only two speakers (the trouble source turn speaker and the repair initiation speaker) and are due to ongoing unresolved troubles in a given repair sequence, while affiliative multiples, on the other hand, always involve more than two speakers (making them a feature typical of multi-party interaction) and serve primarily the purpose of affiliation rather than that of resolving ongoing problems, i.e., they are an interactional resource for speakers to align themselves with other interactants (Egbert, 1997, 2002). Thus, it is possible for an affiliative multiple to feature two or more repair initiations by different interactants but only one repair operation, while true multiples generally feature several repair operations, at least one

in response to each repair initiation. It is rare, however, for both true and affiliative multiples in the data to feature more than two repair initiations. This is significant particularly in the case of true multiples because it suggests repair behavior that is similar to that of native speakers of both English and German, where true multiples featuring more than two repair initiations are extremely rare (Schegloff et al., 1977; Egbert, 2002).

Another feature of other-initiated repair sequences in native speakers that was borne out in my data is that of increasing specificity in multiple repair initiations. This highlights not only the similarity between the repair behavior in these groups and that of native speakers, but also supports the robustness of the repair mechanism in general across various languages (though with exceptions) and contexts (Egbert, 2002). Further support for this similarity in the repair behavior of NSs and the NNSs in this study is found in the fact that even multiples featuring only two repair initiations are not particularly common neither in interaction among NSs, where the majority of troubles get resolved at the first attempt (Schegloff et al., 1977; Egbert, 2002), nor for the repair sequences in this study. Specifically, even though true multiples do appear with some regularity, the majority of troubles are nevertheless resolved relatively quickly and efficiently in the data. The fact that the learners display such similarities to native speakers of German in the organization of repair shows that they are able to orient to the underlying rules, i.e., the organization, of repair in the target language despite their incomplete knowledge of the language and without explicitly having been taught these rules, thus enabling them to resolve

troubles quickly and efficiently. This supports the notion that the organization of repair may, on its fundamental level, be context-free.

Although overall rare, when true multiples do occur in the data, most of them appear to be attributable, at least in part, to a deviation from the trouble source – repair initiation relationship discussed in chapter 3, whose general function it appears to be to assist repair operation speakers with selecting a repair operation that is designed to be the most likely to resolve the trouble successfully (see chapter 4). This supports the notion that there is a mechanism inherent in repair sequences that enables trouble source turn speakers (1) to determine what kind of problem the repairinitiating speaker is facing and (2) to resolve this problem most efficiently or effectively – a relationship research has not yet addressed in great detail. The data for true multiples thus suggests that if the trouble source – repair initiation relationship is not accounted for, the repair operation may be more likely to be unsuccessful because of a misrepresentation of the trouble source via the chosen type of repair initiation. In the data, this is most obvious in Group 1 (but can also be observed in Group 2), where non-specified repair initiations are often used to target lexical trouble sources, thus yielding a repetition, which, however, is unsuitable to resolve lexical types of troubles.

However, in addition to the role this relationship, and particularly deviations from it, appears to play in the occurrence of true multiples, another factor, namely the types of trouble sources involved in the repair sequences, may also be of importance in this respect. Specifically, in chapter 3, it was shown that Groups 1 and 2 primarily

seek to resolve linguistic, i.e., language-related, types of troubles (and particularly lexical ones), while Group 3 primarily attends to content-related troubles, a disparity that may be attributable to differing levels of language ability (see discussion in chapter 3). This is not to say that content-related trouble sources occur less frequently in Groups 1 and 2 or that language-related troubles do not occur in Group 3; however, only those trouble sources that speakers overtly attend to are available for analysis and the frequency with which certain trouble sources are attended to may vary across groups, which may or may not reflect the actual occurrence of such troubles. However, it can be said that while speakers in Groups 1 and 2 more frequently attend to language-related trouble sources than they do content-related trouble sources (vis-à-vis Group 3, which does not appear to attend to languagerelated trouble sources with any frequency), these are also the groups where true multiples are more common than in Group 3. It is possible, then, that the types of trouble sources groups primarily seek to resolve may play a role in the appearance of true multiples. Specifically, it seems possible that language-related troubles may overall be more difficult to resolve than content-related troubles because they are indications of problems with the very language in which the repair operations also occur. This may lead to additional or new problems with the initial repair operations, which may render them unintelligible to the repair-initiating speaker, possibly to the point where they not only fail to resolve the trouble, but may in fact constitute new trouble sources themselves. Examples of this are evident in excerpts (24), see page 91), in Group 1 or (21), see pages 81-82, in Group 2, among others.

While it was hypothesized in chapter 3 that it may be in part due to the shorter length (or lower intensity) of exposure to the target language in Groups 1 and 2 (visà-vis Group 3) that such language-related types of trouble sources primarily feature in these groups, it is now evident that this may also have interactional consequences in repair sequences: It may not only lead to more difficulties with producing certain repair operations (e.g., linguistically more complex explanations for lexical trouble sources) in the target language, but also possibly with understanding them, thus influencing the occurrence of true multiples. In fact, it is possible that this may be one of the reasons for the preference for linguistically non-complex repair operations in Group 1, i.e., producing repair operations that are linguistically easily accessible to other group members. This would mean that groups orient to their own respective level of (incomplete) language knowledge at various points in the repair sequence: the trouble sources they attend to (where the frequent treatment of lexical trouble sources indicates troubles with the language and thus possibly the level of language knowledge in particular groups), the repair initiation (where the same groups that attend to language-related troubles may choose linguistically non-complex repair initiations, thus potentially increasing the potential for true multiples if the repair initiations are not applicable to the trouble source – as is often the case for lexical trouble sources), and in the repair operation (which may be either again linguistically non-complex, thereby often not resolving particularly lexical trouble sources, or may in fact be complex, but be in the same language in which the trouble source occurred and thereby increase the potential to be difficult to understand for the repair initiation

speakers). In fact, an attempted repair operation may thus even become a new trouble source, thereby causing the repair sequence to become more complex. Not only are Groups 1 and 2 thus more language- (rather than content-) focused, but this may clearly also have interactional consequences for the repair sequences – i.e., they may become longer and more complex. Clearly, then, both the deviations from the trouble source – repair initiation relationship as well as the (shorter) length of exposure to the target language and the related preferred types of troubles attended to influence the organization of repair in these groups; specifically, they increase the potential for true multiples. Thus, the reason for the occurrence of true multiples need not necessarily be the repair initiation and its suitability for indicating particular trouble sources, but can also be the repair operation, which may be chosen for its linguistic noncomplexity rather than the type of trouble source involved in the sequence. In fact, as evident in excerpts (9) or (34), for example, it is possible for the type of trouble source to be 'correctly' implicated in the repair initiation, but be passed over in favor of less linguistically-complex repair operations.

Although both deviations from the mechanism described in chapter 3 as well as language ability as displayed via particular preferences apparent at different points in the repair sequence thus appear to play a significant role in the occurrence of true multiples, other factors influence this feature as well. This is particularly evident in the two repair sequences in the data that turn longer and more complex. Specifically, the context of data collection may play a role (this is important particularly vis-à-vis Egbert's observation (2002) of a very long true multiple; however, the conditions

surrounding her data collection were very different), the individual speakers may influence the sequences (i.e., some speakers may be more persistent than others), or there may be other factors (e.g., trouble sources may be arbitrary or repair operation speakers may misinterpret the trouble source although the repair initiations are very specific in their indication of the trouble source). Thus, there are a variety of factors that may influence the organization of other-initiated repair in general and the occurrence of true multiples in particular. It should therefore be noted that not only are the groups in the study not uniform (i.e., the repair behavior of individual speakers within the group may differ significantly), but the same is true for the factors influencing the organization of other-initiated repair sequences in general: Although the trouble source – repair initiation relationship appears to be a major factor, it is not the only relevant aspect in the organization of other-initiated repair in these groups.

The fact that different groups do generally orient to this relationship, but do so to different degrees (specifically, Group 3 appears to adhere to it more systematically than other groups), with various factors influencing the deployment of certain repair initiations or repair operations (see chapters 3 and 4, respectively, for a detailed analysis), suggests that with longer or more intense exposure to the target language, speakers increasingly orient to this systematic mechanism, enabling them to resolve trouble more efficiently, as is evidenced in the occurrence of fewer true multiples. It is possible that this is related to the level of language ability in the different groups, as particularly Group 1 exhibits a preference for both linguistically simple repair initiations as well as repair operations, while no such preference is, for example,

observable in Group 3. Such a link between language ability and the efficiency with which troubles are resolved is further supported by research showing the influence of non-nativeness on the complexity of repair sequences (see, for example, Egbert [2002]). Thus, it is possible that learners at different ability levels not only exhibit different foci on trouble sources (with learners at higher levels of ability focusing more on content-related trouble sources), but also prefer different types of repair initiation and repair operation techniques (with learners at higher levels of ability generally preferring more complex ones). For learners at higher levels of ability, this results in both a greater diversification in repair initiation and repair operation techniques, and a stronger relationship between trouble sources, repair initiations, and repair operations, thus leading to more efficient repair sequences. While both the stronger focus on content as well as this higher efficiency would indicate an approximation of native speaker repair behavior, there have been no descriptions in the literature on repair, of which the author is aware, of a systematic relationship between trouble sources and repair initiations, which, in turn, influences repair operations, in native speakers (with the exception of findings indicating a relationship between certain sequential or hearing-related trouble sources and non-specified repair initiations (Drew, 1997; Svennevig, 2008), which often lead to repetitions of the trouble source). Thus, although the fact that at least one such specific relationship has been found in native speakers and was borne out in this project supports the findings in this study as possibly, at least in part, relevant in native speaker interaction as well,

it is also possible that the mechanism described here may be a mechanism unique to the learners' interlanguage.

Overall, while true multiples are very rare in the data, they can be said to be much more frequent in Groups 1 and 2 (where they account for approximately one third of all repair sequences) than they are in Group 3 (where they only account for approximately one tenth of all repair sequences). This is very different from affiliative multiples, where the opposite trend is observable – they occur more frequently in Group 3 than in Groups 1 and 2. While the tendency in Group 3 towards fewer true multiples can probably largely be explained by their efficient use of the trouble source – repair initiation relationship described in chapter 3 (see discussion above), it is less clear why affiliative multiples occur nine times in Group 3 but only one or two times in Groups 1 and 2. One possible explanation can perhaps be found in the study abroad experience: At the point of data collection, Group 3 has already spent six weeks together, during which time they have spent a daily minimum of six hours together, including time spent inside and outside of the classroom, as well as the weekends. Thus, these students are perhaps more likely to know each other well and may thus possibly be more comfortable with one another than the other groups, who, at most, spent 50 minutes a day together in class. It is possible that this not only leads to lower inhibitions in displaying one's own troubles in understanding, which could also help explain the higher incidence of repair sequences in the group in general (see chapter 3), but thereby also to an increased willingness to align with and thus support someone else's attempts at resolving their troubles with understanding.

This is particularly interesting in respect to Svennevig's (2008) and related research showing that some trouble sources and repair initiations may be more socially sensitive than others. Pomerantz (1984, as cited in Svennevig, 2008, p. 335), for example, showed that different types of problems may be more or less serious to the interactants and their relationship. While it was already discussed in chapter 3 that this may influence the occurrence of true multiples, i.e., speakers may choose to treat problems as hearing problems first (thus issuing a non-specified repair initiation) before treating it as an understanding problem (i.e., a more 'serious' problem), it is possible that it also influences affiliative multiples. Specifically, in a group wellacquainted with one another, such as the study abroad group, problems in general may be less socially sensitive and thus not only attended to more often in general (as evident in the higher occurrence of other-initiated repair sequences in general in Group 3), but also more often in support of someone else's troubles (as evident in the higher occurrence of affiliative multiples in that group), which requires speakers to reveal their own troubles in the process. Clearly, then, the study abroad experience may be a relevant factor in the organization of repair in this data.

Apart from their different purposes and the number of speakers they involve, affiliative multiples and true multiples in the data also differ in other structural factors. Specifically, affiliative multiples do not always follow the principle of increasing specificity observable in true multiples. In the data, this may be largely attributable to the fact that increasing the specificity in a repair initiation is only possible when and if the highest level of repair initiation possible in a given context

has not already been reached at the time the affiliation takes place. Thus, while a tendency towards increasing specificity is observable in affiliative multiples, this tends to occur primarily when the initial repair initiation is relatively unspecific in locating the trouble source. This makes sense, as in such instances, an affiliative multiple can serve not only to align one speaker with another, but also to contribute towards the resolution of the trouble source. I have argued that in those instances, the multiple repair initiations, despite involving more than one repair-initiating speaker, appear to resemble a true multiple, which may, in fact, emphasize the affiliative nature of the affiliative repair initiation, with the speakers initiating repair in a form that is typical of a single repair-initiating speaker in a repair sequence.

In contrast to affiliative repair initiations featuring increasing specificity in such an affiliative multiple, affiliative repair initiations that are of equal specificity do not contribute new information towards the resolution of the trouble source and thus appear to serve the exclusive purpose of affiliation, specifically since they, like nearly all affiliative repair initiations, in fact delay a repair operation that may otherwise resolve the trouble more quickly (Egbert, 2002). Affiliation thus appears to be an important factor in repair sequences in the data. This is significant particularly as it was shown in this chapter that there does not tend to be any interactional pressure on repair initiation speakers in the data to other-initiate repair and thus make their troubles overt (with the exception of those cases where the trouble source is contained in a question directed at them). Considering that a resolution of the very trouble source they are experiencing trouble with has already been put in motion by the initial

repair initiation, this clearly shows that those speakers who issue affiliative multiples do so because they *choose* to reveal their own trouble in order to align with other speakers.

However, the fact that the sequences that are available for analysis in the data are primarily instances where speakers *choose* to make their troubles overt implies that there may be a number of problems not overtly addressed in the data. In fact, there are several instances in the data where this appears to be the case. This clearly shows that the instances available for analysis do not always coincide with the actual prevalence of particular problems; rather, they only show the problems that speakers choose to attend to and it is important to be aware of the fact that it is possible that the troubles these speakers choose to prevalently overtly mark as such may not necessarily in actuality be the most prevalent ones. However, this does not render the data insignificant. In contrast, the data thus reveal the troubles that speakers themselves consider relevant and consequently orient to. That is, Groups 1 and 2 may consider language-related troubles more relevant for achieving smooth conversational interaction (although they may certainly also experience content-related troubles), while Group 3 may consider content-related troubles more relevant (although they may also experience language-related troubles). Along with evidence of a displayed preference for linguistically less complex types of both repair initiations and repair operations in Groups 1 and 2, it can thus be hypothesized that the preference to attend to linguistic troubles may be related to a lower language ability in those groups (as compared to Group 3). This would mean that the higher language ability in Group 3

allows this group to focus less on language-related troubles and more so on contentrelated troubles.

Apart from the repair initiations in affiliative multiples, it was shown in this chapter that affiliative practices also play a role in the repair operation as well as the post-resolution phase of the repair sequence. In the repair operation phase of the repair sequence, the affiliative practices appear to be very similar to the ones described in affiliative multiples. In fact, in a move similar to that of multiple repair-initiating speakers producing increasingly specific repair initiations that resemble a true multiple and thus collaboratively acting like one speaker involved in a true multiple, repair operation speakers have also been shown to affiliate to the point where they collaboratively produce a repair operation.

In the post-resolution phase, finally, a strong orientation to mutual understanding can be observed. Specifically, speakers who had previously initiated repair and thereby indicated that they were not experiencing mutual understanding vis-à-vis the other speakers in the group – as well as other speakers who have previously violated this orientation towards mutual understanding (in the analysis section of this chapter, an example of the trouble source turn speaker engaging in this behavior was given: He had not only failed to provide a successful repair operation, but also 'caused' the original problem by using an incorrect lexical item) – can be seen engaging in similar affiliative practices after the resolution of the trouble has taken place. They do this by showing that they understand whatever had been a problem before, thereby trying to reestablish a connection to the conversation before

the interruption took place and show that they have achieved mutual understanding again. This reaffiliates these speakers with the group (particularly those speakers who had not indicated any troubles with mutual understanding and thus represent the consensus) and can be achieved, for example, through laughter, agreement, or some other comment on or continuation of the original trouble source turn. This shows not only that all speakers orient to the organizing principle of mutual understanding (i.e., intersubjectivity), but also that other-initiated repair is a mechanism for establishing and maintaining this mutual understanding, which not only highlights the important role other-initiated repair plays in group dynamics (namely, the maintenance of group cohesion), but also in the negotiation of meaning. I will return to the latter point in more detail in chapter 6.

Overall, this chapter has highlighted that affiliation is an important interactional organizing principle in these groups. Specifically, all groups exhibit a strong tendency towards displaying and maintaining mutual understanding, which other-initiated repair serves to achieve. In particular, while a repair initiation makes explicit a disruption in mutual understanding, it is – at the same time – the means by which mutual understanding is sought to be reestablished, which is generally eventually achieved by affiliating with the group in the post-resolution phase of the repair sequence.

6. Conclusion

6.1. Introduction

In this dissertation, I have examined how American learners of German engage in the conversational practice of repair. Specifically, I have investigated other-initiated repair sequences, i.e., instances of troubles with hearing or understanding which one or more interactants are experiencing with another interlocutor's speech. This type of repair sequence was chosen not only because of its important role in the organization of everyday conversation, where it plays a vital role in both establishing and maintaining intersubjectivity, i.e., mutual understanding, as well as negotiating interpersonal and interactional issues among interactants (e.g., affiliation), but also because of its role in SLA, where it is seen as having the potential to drive interlanguage development forward. It is clear then that it is important for learners of a given language to be able to successfully engage in interactional (other-initiated) repair. It was the purpose of this dissertation to investigate to what degree that is the case. Specifically, the following questions were to be investigated:

1) How do American learners of German other-initiate repair?

In order to better understand the organization of other-initiated repair in the learners in this study, results of the study were compared to previous research findings in native speakers of English and German as well as nonnative speakers of German.

Comparing previous research on repair in nonnative speakers, data for which were frequently gathered using unequal power speech exchange systems such as classroom

or oral interview settings, with the findings of this dissertation, data for which were gathered in an equal power speech exchange system approximating naturally-occurring interaction, allows for an identification of the influence of the data collection environment on learner behavior. This environment was found to significantly influence the occurrence of particular types of repair initiations. The approximation of naturally-occurring interaction in an equal power speech exchange system furthermore allows for a comparison of the results presented here to those previously found in native speakers, thus enabling the drawing of conclusions as to whether certain behaviors evident in the data may approximate native-like repair behavior. It was found that learners in different groups favor different types of repair initiations, with some learners being more native-like than others.

2) Which kinds of trouble sources do learners encounter or: What are the purposes of their repair initiations?

By means of the next-turn proof procedure, both the participants in a conversation as well as researchers can (in most cases) determine the type of trouble that is at the center of a given repair sequence. Primarily, three types of trouble sources were found to be common in the data; however, the frequency with which they occurred in different groups varied significantly. In light of the data presented in this study as well as previous research on both native as well as nonnative speakers primarily of English (e.g., Shonerd, 1994), it was found that there likely is a connection between learners' levels of language ability and the types of trouble sources attended to in

repair sequences. This suggests that the organization of repair may, to some degree, be related to level of language ability.

3) How do the troubles get resolved?

While much research has focused on how learners initiate repair, there is little research on how or why either learners or native speakers perform a particular repair operation. Thus, this dissertation provides an initial, although likely basic and expandable, classification system of repair operation techniques as they were observed in the data. Although a comparison with previous data was not possible, a comparison across groups yielded different preferences for the various repair operation techniques available. This was similar to observations from repair initiation data, with both data sets supporting the notion that there may be a connection between levels of language ability and the organization of repair in learners.

Specifically, certain learners use more linguistically complex repair operation (and initiation) techniques than others.

4) How are the above questions interrelated (i.e., how do repair initiations, trouble sources, and repair operations relate to one another)?

There are few systematic accounts that the author is aware of that describe any kind of systematic relationship between trouble sources, repair initiations, and repair operations in the organization of repair. In contrast, such a relationship has often been denied (Svennevig, 2008, p. 347). However, in the data, a relationship was clearly observable and appeared to be designed to allow trouble source turn speakers to not only determine – via the repair initiation – what the specific type of trouble is,

but also what kind of repair operation may be best suited to repair this kind of trouble. While no such system has previously been described, it may in fact contribute to an explanation how learners can efficiently negotiate the repair process despite their sometimes limited target language knowledge.

5) Do the answers to these questions differ in the different groups and how so?

Specifically, what is the role of a study abroad program in the organization of repair in these learners?

As mentioned above, groups differed significantly in all elements of the repair sequence: the trouble sources, the repair initiation techniques, and the repair operation techniques. Specifically, it appears that there may a connection between the level of learners' language ability and the organization of repair in these learners. While the data in this dissertation is limited by the cross-sectional study set-up in that no conclusions can be drawn as to what the particular causes of these differences may be (i.e., it cannot be determined whether a particular difference may or may not be caused by the study abroad environment in which some of the data was taken) or whether any development has taken place in individual learners, previous research data about repair behavior in learners at different levels of language ability can provide baseline data, a comparison with which allows for inferences about whether learners in this dissertation may be operating at different levels of language ability. Evidence from the data suggests that this may be the case.

In particular the study abroad group was found to behave significantly differently form the other two groups in the organization of repair. This is

particularly interesting as in research on the linguistic benefits of study abroad programs, it is not yet clear which qualitative differences exist between students who study abroad and those who do not (Freed, 1993, p. 155) or whether students studying abroad become more target-like in their language use (Barron, 2003, pp. 2-3). Learners in the study abroad group were in fact found to be significantly more native-like in their use of the repair mechanism than learners in other groups. While the data does not provide definitive information about the specific cause of this observation, the cross-sectional macro-level comparison across groups nevertheless suggests that the study abroad environment may play a role in it.

In the following, the specific findings of this dissertation will be summarized in light of the questions outlined above.

6.2. Results

6.2.1. Repair Initiations

How do American learners of German other-initiate repair?

Overall, the learners in this study were found to use a wide range of repair initiation techniques; in fact, all types of repair initiations that appear in native speakers of English were also found in the data (non-specified repair initiations, partial repeats, partial repeats plus question words, question words, and candidate understandings), albeit with some discrimination among groups (see the next paragraph and particularly section 6.2.4 for a more detailed discussed of this aspect). In addition, learners in this study were also found to use a sixth type with frequency,

i.e., explicit questions. While explicit questions have not previously been classified as a separate category, which may be partly due to the fact that they may have been characterized as partial repeats plus question words, I have decided to establish them as a separate category (see chapter 3).

In respect to repair initiation techniques, similarities to previous findings in both native speakers as well as nonnative speakers of German were found in the data. Specifically, research results by both Egbert (1998) and Liebscher and Dailey-O'Cain (2003), who found a strong prevalence of either partial repeats or candidate understandings, respectively, in nonnative speakers of German, were borne out. In respect to the present study, it is particularly notable that Egbert (1998) found a prevalence of partial repeats in her lower level (first year) learners, a result which was corroborated in the lower level learners in Groups 1 and 2 in this data, and Liebscher and Dailey-O'Cain (2003) found a prevalence of candidate understandings in their advanced learners, which corresponds to the preferences of the more advanced Group 3 in this study. Thus, the data presented here not only supports the notion that learners exhibit specific preferences for certain types of repair initiations, but also suggests that this preference for specific types of repair initiations in particular groups may be related to the speakers' overall level of language ability. This relationship between the preference for specific repair initiations and language ability is two-fold: Not only do learners appear to orient to the complexity of particular repair initiations (with learners in Groups 1 and 2 preferring less complex repair initiations and learners in Group 3 making extensive use of more complex repair initiations), but the

occurrence of particular types of repair initiations also appears to be related to the types of trouble sources the learners in different groups attend to. This latter point, however, likewise appears to be related to language ability levels. I will return to this point in more detail in sections 6.2.4 and 6.2.5.

While this study thus corroborates several previous research findings in nonnative speakers of German, there are also notable differences. Specifically, unlike findings by both Egbert (1998) and Liebscher and Dailey-O'Cain (2003), where nonspecified repair initiations were virtually absent, these repair initiations were not at all uncommon in my data. I have attributed this to the context in which the data was collected (see chapter 3). Specifically, while I have argued that the data collection set-up used for this dissertation closely resembles naturally-occurring interaction in an equal power speech exchange system, both Egbert's and Liebscher and Dailey-O'Cain's studies were conducted in what are essentially unequal power speech exchange systems (an oral exam and a classroom environment, respectively). It appears then that learners orient to the setting in which the talk-in-interaction takes place in such a manner that it influences the organization of repair (a point both Egbert and Liebscher and Dailey-O'Cain have discussed in their respective studies). Notably, equal power speech exchange systems are also where data on native speaker interaction is generally collected and where, incidentally, non-specified repair initiations are also not at all rare. Thus, the lack of non-specified repair initiations in Egbert's and Liebscher and Dailey-O'Cain's studies can likely not be attributed to the

fact that the interactants are nonnative speakers, but rather appear to be a result of the situational environment in which the interaction takes place.

Another aspect that is likely influenced by the data collection context is the appearance of typical 'textbook' forms (such as 'Wiederholen Sie bitte', i.e., 'Repeat please') or negative L1 transfers⁴⁵ (such as 'Entschuldigung', i.e., 'Excuse me'), which were found in Egbert's study (1998), but did not occur in the learners in this study. Particularly the fact that no 'textbook' forms appear in my data is likely related to this circumstance, considering that Egbert's subjects were specifically told to initiate repair in this manner (i.e., by asking for repetition) prior to their interviews (1998, p. 152), despite the fact that these are not repair initiation forms found in native speakers of German or English. In the absence of such explicit instruction, the absence of 'textbook' repair initiation forms in the data may thus constitute an instance of positive L1 transfer. 46 This does not, however, explain the absence of 'Entschuldigung' in the data. It is not clear why this example of negative L1 transfer does not occur in the data. However, it is possible that it may be coincidence, considering that, although it is unlikely, it cannot be definitively asserted whether or not learners may have been told about this negative transfer at some point during their German language studies.

However, repair initiation techniques are not a regular feature of the language curriculum for the students in this study and it is likely that the appearance of the five types of repair initiations that are common to English and German native speakers (i.e., non-specified repair initiations, partial repeats, partial repeats plus question

words, question words, and candidate understandings) can be considered an instance of positive pragmatic L1 transfer. Thus, positive L1 transfer may allow these learners to appear native-like in the types of repair initiation techniques they employ despite likely never having received overt instruction in repair initiation techniques, and while none of the possibly 'typically' German repair initiation techniques (Egbert, 2002) appear, this circumstance does – at the very least – not subtract from this resemblance of native-like repair behavior. However, the learners in different groups in the study exhibit strong preferences for different types of repair initiations; thus, not all learners can be said to behave equally native-like. I will discuss this point in more detail in section 6.2.5.

6.2.2. Trouble Sources

Which kinds of trouble sources do the learners encounter? What are the purposes of the learners' repair initiations?

Overall, three different types of common trouble sources were observed in the data: lexical, content-related, and sequential trouble sources.⁴⁷ While most repair initiations in the data are deployed to attend to lexical types of troubles, content-related troubles also appear frequently; however, sequential types of trouble sources were found to be less common. The tendency to attend to lexical trouble sources is very pronounced particularly in Group 1, while the tendency to attend to content-related trouble sources is particularly strong in Group 3. In Group 2, there is also a strong tendency to attend to lexical troubles; however, learners in this group also

attend to content-related trouble sources noticeably more frequently than those in Group 1, yet less frequently than those in Group 3. This suggests that the types of trouble sources predominantly attended to in the different groups may be related to language ability (possibly, a larger vocabulary). Specifically, previous evidence from both native speaker and nonnative speaker data suggests that particularly learners of lower proficiency levels tend to focus on lexical types of trouble sources and more advanced nonnative as well as native speakers tend to focus more on content and discourse related features in a conversation (e.g., Buckwalter, 2001; O'Connor, 1988; Salo-Lee, 1991; Shonerd, 1994). This makes sense as native speakers are perhaps not as likely to encounter as many lexical troubles as nonnative speakers who are still in the process of learning the target language and its vocabulary. Specifically, the learners in Group 1 have only had two semesters of language instruction and they are the most lexically-oriented group in the data. While, overall, Group 2 is also still strongly focused on lexis, there is an increased focus on content-related trouble sources in this group vis-à-vis Group 1. In contrast to Groups 1 and 2, there is no evidence of lexical troubles in Group 3, with this group focusing strongly on contentand discourse-related troubles. This closely resembles native-like repair behavior (Shonerd, 1994); thus, the learners in Group 3 can be said to be the most native-like in this respect in the data.

While it is likely, especially vis-à-vis evidence discussed in 6.2.1 and 6.2.3, that language ability plays a role in the organization of repair, another factor may also be of significance. Specifically, a certain level of language confidence in the study

abroad group may contribute to the results discussed above. Possibly as a result of having used the language every day for several weeks in a variety of communicative settings, learners may feel more comfortable with the language, resulting in more confidence in using the language and less concern with (though not necessarily fewer occurrences of) lexical troubles (although a larger vocabulary may, in fact, exist). Furthermore, because of presumably more interaction with native speakers, who are very discourse-focused (see above), learners in this group may try to gain more information on lexical items from context, rather than treating the lexical troubles explicitly. It is likely that this interpretation of the data may play at least a certain role, considering that overt repair sequences (as discussed in chapter 5) are a result of what learners *choose* to attend to, i.e., consider relevant, at any given point in the conversation.

6.2.3. Repair Operations

How do the troubles get resolved?

Unlike for repair initiations, there are no well-defined categories of repair operations in the literature that the author is aware of.⁴⁸ As a result, it is difficult to compare results from the data to previous research both in native speakers as well as nonnative speakers in this respect. However, in the data, three different types of repair operation techniques could be identified, which accounted for almost all repair operations: explanations, repetitions, and acknowledgments. While this certainly represents a preliminary categorization system, it is nevertheless a good starting point

for a discussion of repair operations in the data. It is evidence that learners choose from among a variety of repair operations available to them and are able to employ them in a systematic manner to successfully resolve specific types of trouble sources.

Overall, explanations appear to be very versatile in that they are applicable to resolving all types of trouble sources discussed in 6.2.2, but repetitions and agreements seem to be more restricted in their applicability. However, while explanations occurred in response to all three types of trouble sources in the data, they nevertheless appear to have a specific relationship with lexical trouble sources in that they are the only type of repair operation that can resolve these, i.e., lexical, trouble sources. This is likely due to the fact that explanations are the only ones among the three types of repair operations that provide new information in the repair operation.

Much like explanations, the success of acknowledgments appears to be relatively independent of the type of trouble source, but does generally result from comprehension checks. This makes sense, considering that such an acknowledgment is the only required element in a comprehension check where successful understanding can be confirmed. In contrast to explanations, repetitions most commonly successfully resolve sequential trouble sources, which is likely related to the fact that sequential trouble sources are not evidence of troubles with the language or the content conveyed in it, but often with external circumstances (such as surrounding talk or noises), which can thus usually be resolved by repeating the original utterance.

In addition to the systematic differentiation of various repair operation strategies to resolve specific problems, there is also evidence in the use of repair operation techniques across groups that language ability plays a role in the selection process for these techniques. Specifically, Group 1 favors structurally simple repair operations such as repetitions and acknowledgments, while Groups 2 and 3 both employ more structurally complex repair operations (particularly, explanations) with frequency. I will return to this point in more detail in section 6.2.5.

In the following, the relationship between repair initiations, trouble sources, and repair operations will be discussed in more detail.

6.2.4. Interrelations of Repair Initiations, Trouble Sources, and Repair Operations

How are the above questions interrelated (i.e., how do repair initiations, trouble sources, and repair operations relate to one another)?

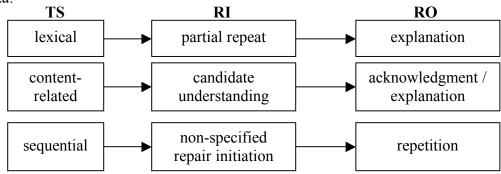
Overall, a very systematic relationship between repair initiations, trouble sources, and repair operations was observed in the data. Specifically, trouble source speakers orient to repair initiations for information about the type of trouble source and subsequently select a type of repair operation suited to resolve this type of trouble source. In other words, results from sections 6.2.1, 6.2.2, and 6.2.3 combine to indicate a systematic relationship.

In particular, it appears that the occurrence of specific types of repair initiations can indicate specific types of trouble sources. Specifically, partial repeats

tend to indicate lexical trouble sources, candidate understandings tend to indicate content-related trouble sources, and non-specified repair initiations tend to indicate sequential trouble sources. Explicit questions (i.e., the fourth commonly occurring type of repair initiation; others tended to be rare or non-existent) commonly occurred both with lexical and content-related trouble sources, but rarely did so by themselves. That is, they tended to occur in multiples, either with lexical trouble sources following a partial repeat, or with content-related trouble sources preceding a candidate understanding.⁴⁹ It is likely this systematic relationship between the trouble sources and the repair initiations that subsequently allows the trouble source turn speaker (or another repair operation speaker) to select a repair operation technique that is most likely to resolve this particular type of trouble without overtly discussing the type of trouble source present. In other words, trouble source turn speakers orient to the repair initiation for an indication as to the type of trouble that the repair-initiating speaker is experiencing.

As a result, successfully resolved lexical trouble sources tend to be resolved by way of explanations, which appear to be necessary to resolve lexical troubles as they are the only type of repair operation containing new information. In fact, if other types of repair operations occur with lexical trouble sources, this often leads to a multiple, thus delaying the resolution of the trouble by making the repair sequence more complex. Similarly, content-related trouble sources tend to be successfully resolved by acknowledgments (or, alternatively, by explanations), which is possibly related to the fact that they are often understanding checks. Finally, sequential types

of trouble sources tend to be resolved by repetitions, which appear to be sufficient for this type of trouble source. This leads to the following general mechanism observable in the data:



Notably, despite their differing and generally low level of language knowledge, learners in all groups appear to orient to this systematic relationship, albeit with some notable differences (some of which will be discussed in more detail in section 6.2.5). Evidence for the overall effective use of this mechanism across all groups comes from multiples and especially true multiples, which are overall very rare in the data. Not only are multiples overall rare, but particularly longer (i.e., those involving more than two repair initiations) multiples are rare, which underscores the efficiency of the mechanism. It is then perhaps not surprising that multiples most often occur in the data when speakers do not adhere to the mechanism described above. More specifically, multiples tend to appear if, via the repair initiation, the type of trouble source is presented as being a specific type of trouble source but later turns out to be a different one. Thus, because the repair operation speakers orient to the repair initiation to gain information on the nature of the trouble source and construct their repair operation accordingly, a repair initiation that is not representative of the type of trouble source present is likely to yield a repair operation that may not, in fact,

be able to resolve the actual trouble source. As a result, the repair sequence then frequently turns into a multiple, generally ultimately revealing a different trouble source. This is particularly evident in the data in instances where speakers face lexical types of troubles but initiate repair via a non-specified repair initiation, thus communicating to the trouble source turn speaker that there is likely a sequential type of trouble present. This tends to yield a repetition, which, however, is not well-suited to resolve a lexical trouble source.

Despite such occasional deviations from the mechanism and the fact that these occur more frequently in some groups than in others, it is nevertheless apparent that all groups adhere to it to a large degree. However, it is unlikely that groups were taught this mechanism or, more generally, anything explicitly related to the organization of repair in class as part of the regular curriculum (they were all participating in the same language curriculum, where repair is not a part of regular instruction). As only one of the groups participated in a study abroad program, it is also unlikely that a particularly L2-rich environment led most learners to use this mechanism. Thus, it is a question worth considering why all groups orient to the mechanism fundamentally in much the same way. However, it is not clear whether this mechanism constitutes an interlanguage mechanism in language learners, may be inherent in the organization of repair in one or both of the language involved, or may even be a universal (i.e., context-free) feature in the organization of repair in general. If such a mechanisms were inherent in the organization of repair in English, the successful use of the mechanism by the learners would likely constitute positive L1

transfer from the learners' native language (English) to the target language (German). However, this hypothesis is difficult to substantiate at this point, as to the best knowledge of the author, little evidence in this area is available from native speakers in either language. In fact, it is often claimed that a (at least a single, determinate) systematic relationship between trouble sources, repair initiations, and repair operations (or parts thereof) does not exist (Drew, 1997; see Svennevig, 2008). However, there is at least some evidence to the contrary: Drew (1997) has, for example, found a relationship between specific types of sequential trouble sources and non-specified repair initiations, and Svennevig (2008) has also discussed certain relationships between different repair sequence elements (see chapter 3 for details). Although similar relationships have also been found in this data (e.g., a relationship between sequential trouble sources and non-specified repair initiations), it is not clear whether this similarity between findings in native speakers and those in this data would hold for the entire mechanism. In fact, it is likely that even if such a mechanism exists among native speakers, it would likely be – at least in part – different. Evidence for this assumption can be found in the data in those cases where the trouble source is in English and, in addition, almost always a proper name, but is generally treated with a partial repeat (refer to discussion on pages 97-100). Despite the strong correlation of partial repeats with lexical trouble sources, this type of trouble source is unlikely in these instances as the trouble source is in English and thus in the native language of all study participants. In fact, in a few of these cases, the trouble source can specifically be identified as likely being of a different nature

(see excerpts (26) and (27) and related discussion, pages 97-100). This strongly suggests that additional (or different) selection mechanisms likely play a role in native speaker interaction.

The fact that there are observable similarities between native speaker and nonnative speaker usage, but also some possible differences, suggests that the mechanism described in this dissertation is, in fact, likely an interlanguage mechanism exhibiting elements both from the L1 and L2 (thus, the possible positive transfer and native-like behavior), but also independent mechanisms (thus the differences).⁵⁰

6.2.5. Differences between Groups

Do the answers to these questions differ in the different groups and how so?

Specifically, what is the role of a study abroad program in the organization of repair in these learners?

As noted above, there are notable differences between the different groups in regard to trouble sources, repair initiations, repair operations, and the efficiency with which they use the mechanism described above, several of which appear to be related to language ability. However, it is important to note that inferences about language ability in this dissertation are limited by the fact that they are primarily established on the basis of a combination of institutional seat time and comparisons with previous research findings in speakers of varying levels of language ability; no standardized tests were administered to the students in order to establish their level of proficiency on a pre-determined scale. However, the findings of this are similar to a number of

previous findings in speakers of different levels of language ability, which allows for the inference – at least on the macro level – of the existence of different levels of ability in the learners in this study.

It is first of all notable that Groups 1 and 2 have a strong tendency to attend to lexical trouble sources (both attend to lexical trouble sources in about one half of all instances), while lexical trouble sources do not occur in Group 3 at all. In contrast, Group 3 largely attends to content-related trouble sources (in approximately two thirds of all instances), a tendency which is also evident to some degree in Group 2, which attends to content-related trouble sources in approximately one third of all instances. In contrast, Group 1 only attends to content-related trouble sources in approximately one sixth of all instances. As previous research has indicated, lowerlevel language learners have been shown to have a strong language-related focus in the organization of repair (e.g., Buckwalter, 2001; Shonerd, 1994), while native speakers' repair sequences tend to be more discourse-related (Shonerd, 1994). Thus, Groups 1 and 2 are more similar in their repair behavior to lower-level language learners, while Group 3 is more similar to native speakers. It is thus possible that Group 3 is operating at a higher level of language ability than Groups 1 and 2. While the data cannot indicate whether it is the study abroad program that causes this difference, it is possible that the study abroad environment in Group 3 plays a role, although it is not clear what that role may be. Specifically, while it is possible that the learners in the study abroad group do indeed operate on a higher level of overall linguistic language ability, it is also possible that they primarily glean pragmatic

information from their L2-rich environment, i.e., they are native-like in the trouble sources they attend to because these are the trouble sources primarily attended to in a native speaker environment, not necessarily because they operate at an overall higher level of linguistic ability. However, data from repair initiation and repair operation techniques suggest that linguistic ability does in fact play a role.

In light of the discussion in 6.2.4 and considering the different foci in the groups on trouble sources, it is perhaps not surprising that the types of repair initiations favored by the different groups vary accordingly. Specifically, nonspecified repair initiations and partial repeats occur with great frequency in Groups 1 and 2, which makes sense considering the structural simplicity of those repair initiations and, particularly in the case of partial repeats, the connection between partial repeats and lexical trouble sources, which are the types of trouble sources most frequently attended to by those groups. It is, however, also this preference for structurally simple repair initiations that sometimes (particularly in Group 1) turns these sequences into multiples because the initial repair initiation is initially selected for its structural simplicity rather than its ability to identify a particular trouble source, thus necessitating an additional repair initiation to clarify the type of trouble source. This preference for structural simplicity over other selection mechanisms, which can lead to a deviation from the mechanism as described above, primarily occurs in Group 1 and, to a lesser degree, Group 2, i.e., the two groups with the presumably least amount of exposure to the target language.

In contrast, Group 3, i.e., the group with the most exposure to the target language in the study abroad environment, primarily uses candidate understandings (in approximately one half of all instances, as opposed to one fifth of all instances in Groups 1 and 2), which makes sense in light of the connection between contentrelated trouble sources and candidate understandings. However, candidate understandings are also structurally more complex, requiring the production of new and independent language, and may thus be more easily accessible to the learners in Group 3 than those in Groups 1 and 2. While candidate understandings do appear in Groups 1 and 2, they often do so in multiples that deal with lexical trouble sources. In these instances, candidate understandings are selected because an initial repair initiation and/or operation was not able to resolve the trouble and the candidate understanding is thus selected as a second choice because it is more specific than the initially used repair initiation, rather than because of the type of trouble source. Clearly, then, repair initiations can also be selected for reasons other than their connection to specific trouble sources (e.g., for structural simplicity); however, these selection mechanisms in fact further support the notion of a connection between the organization of repair and language ability.

Specifically, it can be said that while Group 1 and to a lesser degree Group 2 favor structurally simple repair initiations, such as non-specified repair initiations and partial repeats, Group 3 favors the more complex candidate understandings. This coincides with their different foci on either predominantly lexical trouble sources (which are generally attended to with structurally simple repair initiations) or content-

related trouble sources (which are generally attended to with more structurally complex repair initiations), respectively. This relationship is particularly evident in the use of explicit questions, which are used by Group 1 only with lexical trouble sources (generally in conjunction with partial repeats), by Group 3 only with content-related trouble sources (generally in conjunction with candidate understandings), and in Group 2 with both. It is possible that in order for a learner to predominantly attend to content-related trouble sources, the language per se may need to cease being a trouble source in itself, at which point it would not only be possible for the learner to focus on content-related trouble sources, but presumably also to use more complex repair initiations.

Further support for this analysis, i.e., that language ability plays a role in the selection of repair initiations, comes from the use (or lack thereof) of repair initiations involving question words. As Egbert (1998) has previously hypothesized, question words are likely problematic particularly at lower levels because they require a certain amount of analysis before they can be deployed (p. 158). It is therefore probably not surprising that none appear in Group 1, but a few do in Groups 2 and 3, which may be evidence that learners in Groups 2 and 3 are better able to analyze trouble sources as to their linguistic content. This also gives those learners access to a broader range of repair initiation techniques, thus contributing to a more native-like organization of repair in these learners.

A similar pattern to these observations regarding repair initiations can be observed with repair operations. Specifically, Group 1 also tends to prefer less

structurally complex repair operations, i.e., repetitions and acknowledgments, despite the fact that there is evidence that specific repair operations tend to be better suited to resolve certain types of trouble sources than others. Nevertheless, Group 1 uses such structurally simple repair operations in almost two thirds of all cases. This is particularly remarkable considering that this group attends to the largest amount of lexical types of trouble sources, which is precisely the type of trouble source that can apparently not be resolved by anything other than the more complex explanations. In contrast, Groups 2 and 3 use the more complex explanations just as often as they use the less complex repetitions and acknowledgments.

Particularly in Group 1, this tendency to favor structurally simple repair operation techniques appears to frequently lead to the occurrence of multiples. However, the same can be said for their preference for structurally simple repair initiations. In fact, it is not always clear whether it is a structurally simple repair initiation or a similarly structurally simple repair operation that ultimately leads to the multiples. Particularly because of the strong connection of non-specified repair initiations (as typical indicators of sequential trouble) to repetitions, both of which are structurally simple, it is not always clear where the deviation from the mechanism is caused. Specifically, repetitions may be chosen because of the indication of a sequential trouble source via the non-specified repair initiation (and may thus be a result of the repair initiation) or, alternatively, may be chosen exclusively for their structural simplicity, regardless of the repair initiation.

Clearly, then, all elements of the repair sequence – the trouble source, the repair initiation, and the repair operation – appear to be influenced by the language ability in the different groups. Specifically, it would appear that Groups 2 and particularly 3 use the mechanism more effectively than Group 1 does, as Group 1's preference for both structurally simple repair initiations and repair operations, coupled with its preference for treating lexical types of trouble sources, can lead to multiples, thus leading to a more complex and consequently less efficient resolution of the trouble. However, the data suggest that not only does language ability in general play a role in the organization of repair in these learners, but the study abroad experience in particular may also be significant. Specifically, not only is Group 3 (i.e., the group who has studied abroad) the group that tends to resolve troubles the most efficiently, but they are also the most native-like in terms of various different parts of the repair sequence. While Group 1 definitely exhibits notable differences to the other groups in all parts of the other-initiated repair sequence (the trouble source, the repair initiation, and the repair operation), it is particularly noteworthy in this respect that the results from Groups 2 and 3 also differ as significantly as they do. Although the two groups do not differ as much from one another as they do from Group 1 in the area of repair operation techniques, the differences between Groups 2 and 3 are very pronounced in the areas of trouble sources and repair initiation techniques. Specifically, despite the fact that students in Group 3 have had approximately the same length of exposure to the target language (two semesters) at the beginning of the study abroad program as the students in Group 2 had at the

beginning of their semester, the data at the end of the study abroad program in Group 3 vary significantly from that gathered in Group 2 at the end of the semester. Both in terms of the trouble sources they treat as well as in the breadth and complexity of repair initiations used, the speakers in Group 3 are considerably more native-like than the speakers in Group 2. Not only do speakers in Group 3 exhibit a strong focus on content in terms of trouble sources, which distinguishes them significantly from speakers in both Groups 1 and 2, but they also use a larger variety of repair initiations, which, in addition, tend to be more complex than those used in Groups 1 and 2. Specifically, they favor candidate understandings, which are highly complex repair initiations in that they require the learners to produce new and independent language in the L2. This is quite different from Groups 1 and 2, both of which have strong tendencies, albeit with some differences between the groups, to use simple repair initiations (such as non-specified repair initiations and partial repeats). As previously mentioned, the cross-sectional set-up of the study does not allow for causal relationships to be established; however, significant differences can be observed between groups and particularly in Group 3, and it is worth a consideration whether the study abroad experience may play a role in this more native-like organization of repair in Group 3. It is hoped that future research on this and related data will shed light on this particular issue.

6.3. Issues in SLA

6.3.1 Negotiation of Meaning and Language Learning

In chapter 1, I have discussed the role of negotiation of meaning in SLA. In contrast to CA, which views repair as a means to establish and maintain intersubjectivity, in SLA, repair is viewed as the place where negotiation of meaning takes place, which is ultimately believed to drive interlanguage development forward. However, repair is believed to play an important role in the negotiation of meaning and negotiation of meaning is in fact very evident in the data. In chapter 5, I have discussed the orientation towards establishing, maintaining, and reestablishing mutual understanding, or intersubjectivity, via the interactional practice of affiliation during and immediately following other-initiated repair sequences in the data. In other words, the speakers in the study use affiliation in repair sequences to establish and maintain mutual understanding and in the course of this, negotiation of meaning takes place. Through this negotiation of meaning and associated modification of input, mutual understanding is almost always successfully (re)established in the data, at least in those sequences that are available for analysis, i.e., in those sequences where learners choose to make a disruption in mutual understanding evident.

However, while modification studies operate under the assumption that through modification of input, negotiation of meaning produces comprehensible input, which can then become intake (and, in this view, constitute learning), the challenge for CA scholars is to show that learning in fact *does* happen in or as a result of such repair sequences (i.e., as a result of the negotiation of meaning). In this

respect, Plejert (2003) posited that repair in fact promotes comprehension, likely as a result of negotiation of meaning and the related modification of input. Similarly, Buckwalter states in her paper on repair in Spanish language learners (2001, p. 390) that the other-initiated self-repaired sequences she observed show true negotiation of meaning, i.e., they are attempts to understand one another, rather than attempts to learn or teach a specific word. This thus provides support for the effects of repair on comprehension. The question then is, however, whether this improved comprehension may result in, or in itself constitute, learning. If we view comprehension as its own language skill, it makes sense to say that negotiation of meaning can definitely improve this skill as it allows for the modification of input until comprehension is achieved. Evidence for this claim comes from the fact that mutual understanding is almost always successfully reestablished in the data, suggesting that comprehension indeed improves as a result of repair sequences. However, the main criticism that CA scholars have posited in this respect (see discussion in, e.g., Firth, 1996; Wagner, 1996, 1998; Firth & Wagner, 1998; Markee, 2000) is the assumption in SLA that there is a link between modification of input and language learning (Plejert, 2003, p. 87). The challenge in an SLA study evoking CA then is to show (a) that learning takes place, (b) where it takes place, and (c) how it takes place.

Clearly, the other-initiated repair sequences examined in this study can not a priori be considered opportunities for language learning, as (at least, adult) native speakers also frequently engage in this kind of repair but are likely not

simultaneously engaged in language learning. In a finding similar to Buckwalter's (2001) results, most other-initiated repair sequences in the data reflect true negotiation of meaning in the sense that they are attempts on the part of the speakers to understand one another. This is especially true in cases of trouble sources that deal with the content or the sequentiality of the talk-in-interaction. However, in the case of trouble sources that are language-related in nature, i.e., repair sequences in which the language in itself is the object of repair, one can begin to consider whether language learning may in fact take place there (and these are incidentally also those other-initiated repair sequences that are rare – although not inexistent [Brouwer, 2003, p. 536] – in native speakers). This focus on language-related trouble sources as likely opportunities for learning has certain implications for the data, however. Specifically, it has implications for groups that do not attend to any language-related trouble sources and only engage in repair sequences for the purposes of dealing with troubles related to the content or the sequentiality of the talk-in-interaction (i.e., Group 3); that is, they do not make the language per se a topic of discussion. While this, as discussed before, appears to be a very native-like feature in the organization of repair in Group 3, the question for the purpose of SLA would be whether it may afford these learners fewer opportunities for language learning in other-initiated repair sequences. On the other hand, especially at lower levels of proficiency (i.e., in Groups 1 and 2), other-initiated repair may be a very important mechanism for learners to negotiate language (and particularly its lexis) and possible afford themselves additional opportunities to learn, or at least experiment with, the language. It is possible that the study abroad environment with its strong focus on successful communication leads the learners in Group 3 to focus so strongly on successful communication that they do not search out opportunities for explicit lexical learning as much as lower level learners like those in Groups 1 and 2, who do not have the same kind of L2-rich environment to test lexical hypotheses at their disposal, do. It is possible that the study abroad environment in Group 3 may lead learners to be more native-like pragmatically, i.e., in their use of repair strategies, but, as a trade-off, causes them to seek out fewer opportunities for learning with their peers. These learners may, however, nevertheless test lexical hypotheses, but may do so in environments with native speakers — an opportunity that the classroom learners do not have. From a pedagogical perspective, it might consequently make sense to include such opportunities for experimentation, which are common in naturalistic settings but not so in the language classroom (Ohta, 1995), in the curriculum.

The question remains, however, whether it can, at least in language-focused other-initiated repair sequences in Groups 1 and 2 (i.e., the groups that may seek out such learning opportunities), be shown that learning takes place. This has traditionally been acknowledged as being very difficult: "In talk-in-interaction it is difficult to locate the starting point and possible learning of a lexical item or phrase to a specific moment of talk," specifically as there may be no further noting of the item and no evidence that it was stored (but also not that it was not). (Plejert, 2003, p. 101) In other words, the absence of evidence does not prove that an item was learned, but also not that it was not. Thus, it cannot be said "that sequences of

interaction that cannot conclusively be analyzed as opportunities for language learning do not contribute to language learning" (Brouwer, 2003, p. 343). It is then necessary to find those sequences that may counts as language learning opportunities with a potential for SLA (Brouwer, 2003, p. 535). According to Markee (2000), this may very well be possible, at least in the short term. In fact, there are lexical other-initiated repair sequences in the data in which learning, in the short term, can be seen as taking place. Consider again, for example, the following expanded version of excerpts (11) and (21):

(21) [Davai, Group 2, simplified]

01	Meg:	ääh was bedeute uuh what means how do you say	um uh	in german uh
02		davai? davai		
03	Daphne:	davai?		
04	Rachel:	davai?		
05	Daphne:	ist das is that	Meg:	eheh ja. auf yes in
06		russisch? russian?		deutsch german
07			Rachel:	n[ein n[o
08	Daphne:	was ist das what is that?	Meg:	[ich hab- (.) [I hav-
09				nein, no?
10			Rachel:	hm mh huh uh
11	Meg:	davai? em (.) e davai? um i	l s ist ähm (<i>t is uhm</i>	.) ää[h (.) hm uu[h hm
12	Daphne:			[russisch ja? [<i>russian yes?</i>

```
13
                ein russisch wor[t?
                    russian wor[d?
14
     Rachel:
                                 [lass un:s (.) etwas machen
                                           something do
                                 [let us
15
     Daphne:
                 [lass uns?
                 [let us?
16
                 [m hm (.) [ja
     Meg:
                 [m hm
                           [yes
17
     Rachel:
                           [lass- (.) [lass uns lesen lass uns
                           [let-
                                      [let us read let us
18
     Daphne:
                                       [was ist lass uns
                                       [what is let us?
19
     Rachel:
                 (si[tz-)
                  si[t-
                    [ja, ja, lass uns
20
     Meg:
                    [yes yes let us
21
     Rachel:
                 jа
                 yes
22
                was bedeutet la[ss uns
     Anne:
                 what means le[us
                 what does let u[s mean?
23
     Rachel:
                                [let's
24
     Meg:
                 let's
25
     Rachel:
                 jа
                yes
26
     Daphne:
                let us?
27
     Rachel:
                 jа
                yes
28
     Meg:
                j[a
29
                 [davai auf russisch ist (.) lass uns auf
     Rachel:
                   davai in russian is
                                               let
                                                   us
                                                       in
30
                 deutsch
                 german
31
                 (.)
32
     Daphne:
                00[h
33 \rightarrow Anne:
                   [lass uns
                   [let us
```

34 Meg: lass uns

let us

[swings bent elbows forward

 $35 \rightarrow Daphne: [DAVAI]$

36 Lacy: eheh

37 Daphne: ja

yes

In this excerpt, Meg and Rachel attempt to explain the meaning of the Russian word 'davai' to Daphne and Anne, both of whom initiate repair on the lexical item. At first, it is primarily Daphne who is engaged in the repair sequence(s) (lines 01-13), but after the German translation ('lass uns', i.e., 'let us') for 'davai' is given by Rachel in line 14 and Daphne continues to experience trouble with this new item, Anne also enters the interaction in line 22. The trouble is finally resolved in lines 29-30, after an English translation has been provided (line 23). This resolution is first indicated in line 32, where Daphne issues a change-of-state token to indicate her understanding of the word. It is noteworthy in this context, however, that both Anne (line 33) and Daphne (line 35) subsequently repeat the previously troublesome item, with Anne repeating the German item and Daphne the original Russian item. Daphne even underscores her understanding of the item by supporting her repetition of the word with a hand gesture (she swings both of her elbows forward) signaling the onset of an activity.

This repetition of the trouble source may be important in this context, as "repetition is a form of language play posited to serve an important function in L2 acquisition, with learners repeating what is within their ability to acquire" (Lantolf, 1995, as cited in Ohta, 1995, p. 111). Learners do not always repeat suggested items

and it is not always clear whether that may be because they opt not to or because they are not able to. However, in instances where learners do repeat a previous trouble source, they are repeating lexical items they previously did not know or that were otherwise troublesome. Thus, "this demonstration [i.e., that the speaker can use the new item in his or her own turn] can be seen, at least *locally* (i.e., at this particular point in the interaction) as language learning" (Brouwer, 2003, p. 542). In the above excerpt, both Anne and Daphne were able to ultimately use a lexical item (in German or Russian, respectively) they previously were not able to use and, in fact, did not understand. Thus, at least in the short term, this excerpt can be seen as constituting an instance of language learning.

The same kind of repetition that may indicate short-term learning can be observed in the following two excerpts, particularly excerpt (35):

(31) [Bären, Group 1]

```
01
     Sam:
                 aber keine f- ääh (baren),
                 but no f-uuh bears,
02
                 (1.2)
0.3
                 baren?
     Marc:
                 bears?
04
                 (1)
05
     Marc:
                 baren. jaa[a
                 bears. yes[
06
     Sam:
                           [eheh
                                             [to Rich. [to Marc
                                 Linda:
                                             [wa:m:? [wa:rem? er
07
                 baren?
     Richard:
                 bears
08
                 bare[n?
     Sam:
                 bear[s
09
     Richard:
                     [jahhh
                     [yes
```

```
10
                  [ (.) eheh
                                     Marc:
11
                                                 BAR
                                                 bear
12
      Sam:
                  [bären?
                  [bears
13
      Sam:
                  maybe it's
14
                  bären
                                                 barEN
                                     Marc:
                  bears
                                                 bears
15
      Richard:
                   (woooaach)
                           [gestures a bear clawing at someone
16
      Marc:
                  äh (.) [RAR RA[R RAR [heh[ehe
17
      Linda:
                                  [oh ooo[oh [
      Richard:
18
                                          [ehe[hehe
19
      Sam:
                                              [ehehehe hahaha
20
                   (.)
21 \rightarrow Linda:
                   (ist das,)
                   is that
22
                   (0.2)
                  °ja°
23
      Marc:
                   yes
24 \rightarrow Linda:
                  die w- wörter? (.) für
                  the w- words
                                       for
25
                  (.)
26
                  jaa
      Marc:
                  yes
27
      Linda:
                  ah
28
                  (.)
29
      Linda:
                  ok
30
                  be: (0.5) a umlaut
      Marc:
                              a umlaut
                  be
31
      Linda:
                  oh
32
      Marc:
                  er[r
                  ar[
33 \rightarrow Linda:
                     [bäre
                     [bears
34
                   (.)
```

```
35
    Marc:
             jaa
               yes
36
    Marc:
              mhm [(die) bären
              uhu [ the bears
37
    Richard:
                   [dieses wann: (.) ä- unse:r kultur er
                   [this was
                                  uh our culture er
38
               projekt eheh
               project eheh
39
    Linda:
               ja hh
               yes
```

In this excerpt, Sam and Marc begin a conversation about bears (lines 01 to 06). Linda, however, does not appear to know the word they use and begins initiating repair on it by attempting to produce repetitions of the word (line 07). Marc subsequently begins the repair operation (by way of repetition) in lines 11 and 14, and in lines 15 and 16, both Richard and Marc try to explain the word to Linda by using gestures (line 16) and simultaneously reproducing the sound the animal makes. This appears to resolve the trouble for Linda, as she issues a change-of-state token in line 17 and subsequently checks her understanding in lines 21 and 24 ('is that the word for'). However, although her problem with understanding the meaning of the word 'bären' ('bears') appears to be resolved at this point, Linda does not repeat it, but merely acknowledges it (lines 27 and 29). Despite this acknowledgment and thus possible resolution of the trouble, Marc then begins to spell the word for her (lines 30 and 32). Linda's subsequent change-of-state token in line 31 indicates that this further clarification may in fact have helped her clarify another troublesome aspect of the word (beyond its meaning). It is only after this further clarification that Linda repeats (or is able to repeat) the word (line 33). It is possible that although Linda may

have understood the meaning of the word 'bären' before her repetition in line 33, she was not familiar enough with it at that point in time to use it herself, i.e., repeat it.

Specifically, although she may have learned an aspect of the new word (i.e., its meaning) at that point, this learning was still incomplete. Only after Marc spelled the word for her did her learning of the lexical item become complete (e.g., through inclusion of pronunciation inferable from spelling) and she was only then able to repeat the word.

In the following excerpt, the repair-initiating speaker even goes beyond merely repeating the previously troublesome item and incorporates the thus newly learned item into subsequent discourse. This is likely the clearest example of (short-term) learning taking place in the data:

(35) [Schildkröte, Group 2, simplified]

```
Rachel:
                ich habe (.) schildkröten zwei [schildkröten
                    have turtles two [turtles
02
     Daphne:
                                                [o- sch-=sch-
                                                [o- sh- sh-
                               [forms small ball with hands
03
     Rachel:
               [und sie sind [k(l)eine-
                [and they are [small
04
     Daphne:
                [schil-wie?
                [shil- how
05
     Rachel:
                schildkröten
                turtles
06
     Daphne:
                [schild krö-
                        [gestures big circle in the air
07
     Meg:
                [schild [shield. kröten,
                [shield [shield toads
08
     Daphne:
                (crouton)?
09
     Lacy:
                ahahaha[haha[ha
10
     Anne:
                        [ahah[
```

```
11
                              [toad.
     Meg:
12
     Daphne:
                >sorry<=
13
     Anne:
                 =toa[d.
14
                     [oh right. [schild kröten?
     Daphne:
                     [oh right [toads
15
     Rachel:
                 mhm
                 uhu
16
     Daphne:
                 wie viel?
                 how many
17
     Rachel:
                 zwei
                 two
18
     Daphne:
                 zw[ei
                 tw[o
19
     Rachel:
                   [und sie sind klein
                   [and they are small
20 \rightarrow Daphne:
                 was sch:ild krö[ten?
                 what toads
21
     Rachel:
                                 [weiß nicht ahahh
                                 [know not
                                  I don't know
```

This excerpt begins with Rachel informing the group that she has two turtles (line 01) and it is the German word for turtles ('Schildkröten') that constitutes the trouble source for Daphne, the repair-initiating speaker in this segment. She first initiates repair on the item with a partial repeat plus question word in lines 02 and 04. The fact that Daphne cannot reproduce the word suggests that this is in fact a word she is not familiar with at this point. Both Rachel and Meg subsequently begin the repair operation; Rachel attempts to resolve the trouble by repeating the word (line 05) while Meg begins to translate its different elements into English (lines 07 and 11). While Daphne is subsequently able to repeat the word (line 14), she initially trymarks it, thus likely checking her understanding. After this understanding is

confirmed by Rachel in line 15 ('mhm'), Daphne then asks a question about the turtles, thus indicating a resolution of the trouble. Several lines later (line 20), however, Daphne continues to ask about the turtles and she does so by incorporating the new word into her question ('what kind of turtle?). This shows that Daphne is now able to use and incorporate into her speech a word she previously did not know or – at the very least – was not able to successfully produce.

Such instances of apparent short-term learning are perhaps particularly significant vis-à-vis instances in the data where learner either merely acknowledge a suggested item or sometimes even resist it (Brouwer, 2000, pp. 176-177, as cited in Brouwer, 2003, p. 542). Such instances are exemplified in the following two excerpts. In excerpt (34) below, a lexical item is suggested and acknowledged, but never repeated:

(34) [Office, Group 2]

```
[to Daphne
01
     Steve:
                [nein em weil (.) die deutsch (.) center (.)
                [no um because the german center
                [No, because the (German Department's) office
02
                nicht (.) öffnet (.) jetz[t
                not opens
                                     now [
                is not open now.
                                          [
                               [to Steve
03
     Daphne:
                               [waas? (.) deutschcenter?
                               [what? germancenter?
                to Daphne
04
     Steve:
                ja=
                yes
                to Steve
05
                =ha[hhh h[aha
     Meg:
                   [to Meg[ [Meg moves eye-gaze to Lacy
06
     Lacy:
                   [hahah[a[haha
```

```
[to Steve [Daphne moves eye-gaze to Rachel
07
      Daphne:
                             [das [bü[ro?
                             [the [of[fice?
                                  [to Daphne [Me. moves eye-gaze to Da.
08
      Rachel:
                                  [das bü[r[o
                                  [the of[f[ice
                                                   [Da. moves gaze to St.
                                          [to Rachel [and nods head
09
      Daphne:
                                          [bür[o? [(.) ok
                                          [off[ice[? ok
                                               [to Daphne
10
     Meg:
                                               [büro. .h
                                               [office.
                  to Steve
11
      Daphne:
                  aaa[ah
                              [to Meg and Rachel
                      [to Daphn [e [smiles
                                              [begins to cast gaze down
                      [d- ja [ja [(.) ni- ni[cht offen jetzt
12 \rightarrow Steve:
                      [d- yes yes no- no[t open now
```

In this excerpt (see section 5.3.2 for a discussion of this excerpt), Steve initially uses the word 'deutsch center' ('German center') instead of the (correct) 'büro' (i.e., 'office) to refer to the office of the German department. Daphne experiences trouble with Steve's lexical choice (line 03); in fact, it later turns out to be incorrect and a new, correct, item is subsequently agreed upon by the other interactants (line 07 to 10). Even though Steve appears to acknowledge this new item ('ja ja') in line 12, he does not repeat it when he returns to his original utterance. In respect to excerpt (31) above, this might suggest that Steve understands the item, but may, for one reason or another, not be able to repeat it, i.e., he may experience incomplete learning. As the transcript of this particular data collection session ends with Steve's last turn, it is not clear whether, akin to excerpt (31), other speakers may have subsequently continued to explain the item to Steve until he would have been able to produce it. However,

while this is certainly a possibility, there are other instances of acknowledged but unrepeated resolved lexical trouble sources in the data; thus, such a continuance of the excerpt would not necessarily have needed to occur.

In contrast to excerpt (34), the following excerpt provides an example of a lexical item that not only remains unrepeated, but is in fact resisted:

(24) [Lesen, Group 1]

```
01
     Alison:
                 fernsehen, (.) oprah,
                 watch TV
                               oprah
02
                 (.)
03
     Linda:
                HAHAHA .mh ahahaha .h
04
                 (0.4)
05
     Linda:
                 [mit (.) george clooney?
                 [with george clooney?
06
     Marc:
                 [hast du:
                 [have you
07
                 (.)
08
     Alison:
                 ts nei[n
                 ts no [
09
     Linda:
                       [oh
10
     Marc:
                hast du [gelesen?
                 have you[read?
11
     Linda:
                         [that's the one my roomma[te was
12
     Alison:
                                                   [hmmm?
13
     Linda:
                 watching
14
     Marc:
                hast du gelesen?
                 have you read?
15
                 (1)
     Alison:
                 gelese[n?
16
                 read [
17
     Linda:
                       [gelesen emm
                       [read
                                um
18
                 (0.2)
19
     Alison: (I don't kn[ow)
```

```
20 Linda: [lesen [to read]
21 Marc: [lesen [to read]
22 → Alison: oh JA JA ich äh (0.7) ich lese (.) zwei oh yes yes I uh I read two
23 büche(nt) books
```

In this excerpt, Marc asks Alison whether she was reading during a recent illness of hers (line 10). However, the past participle form 'read' ('gelesen') constitutes a trouble source for Alison, who subsequently repeatedly initiates repair on it in lines 12, 16, and 19. It is only after Linda and Marc (simultaneously) provide the infinitive form of the verb, i.e., 'lesen' ('to read'), that Alison understands the meaning of what she was asked (as indicated by her change-of-state token 'oh' in line 22). In her subsequent answer, however, she does not use the initially provided past participle form of the verb, but rather uses the present tense form of 'lesen', i.e., 'ich lese' ('I read', line 22). This suggests that Alison did not, in the short term, learn the item 'gelesen' during this repair sequence: She neither repeats nor acknowledges it, but rather opts to use a different and simpler morphological form instead.

It is clear then that not all other-initiated repair sequences may be equally suited for SLA and there may be characteristics common to suitable-for-SLA other-initiated repair sequences (other than that they likely have language-related trouble sources) that differentiates them from those sequences that are not. However, there were too few examples in the data of observable successful short-term learning (as opposed to instances where items were merely acknowledged or even rejected) to

identify pertinent characteristics of those other-initiated repair sequences that may provide learning opportunities.⁵¹

However, in addition to the kind of short-term lexical learning discussed above, learners may also benefit from engagement in other-initiated repair sequences in other ways. Specifically, Ohta (1995, 2000) has shown that next turn repair initiations also tend to yield more complexity in the response (i.e., the repair operation), which thus would appear to give learners opportunities to be engaged in and experiment with different levels of language use. This outcome is also observable in the data. Consider again, for example, the following segment taken from excerpt (21):

(21) [Davai, Group 2, extremely shortened and simplified]

```
01
                ääh was bedeutet em (.) äh auf deutsch äh
     Mea:
                uuh what means um uh in german uh
                how do you say 'davai' in German?
02
               davai?
                davai
03
     Daphne:
               davai?
04
     Rachel:
               davai?
05
     Daphne:
               was ist das
                what is that?
06
     Mea:
               davai? em (.) es ist ähm (.) ää[h (.) hm
                davai? um it is uhm
                                            uu[h
                                                     hm
07
                                              [russisch ja?
     Daphne:
                                              [russian yes?
80
               ein russisch wor[t?
               a russian wor[d?
0.9
     Rachel:
                               [lass un:s (.) etwas machen
                               [let us something do
10
     Daphne:
               lass uns?
               let us?
```

```
11 Rachel: lass- (.) [lass uns lesen lass uns (sitz-) let- [let us read let us sit-

12 Daphne: [was ist lass uns [what is let us?]

13 Rachel: davai auf russisch ist (.) lass uns auf davai in russian is let us in

14 deutsch german
```

In response to Daphne's repeated attempts to find out what the words 'davai' and later 'lass uns' mean (lines 03, 05, 07, 08, 10, and 12), Rachel does not initially provide simply a translation of the item (i.e., English 'let's'), but rather seeks to explain its meaning by using it in examples in the target language (German). First, she utters 'Let's do something' (line 09), i.e., instead of translating the item, she produces an entire sentence containing the item, thus clearly using more complex as well as newly and independently produced language. After this does not clarify the item, she goes further and provides more specific examples, that is, instead of 'something', she provides specific example of what one could do: 'let's read, let's sit' (line 11), thus further increasing the complexity of her statement. Apart from attempting to explain the troublesome item to Daphne and thereby resolving the trouble, this may also offer Rachel the opportunity to experiment with the language and test language hypotheses (Ohta, 1995). In this manner, both repair initiation speakers as well as repair operation speakers may benefit linguistically from engaging in other-initiated repair sequences.

It can be said, then, that there does in fact appear to be evidence that otherinitiated repair sequences and the associated modification of input can contribute to learning and that there may thus very well be a link between modification of input and learning, as evident both in the person experiencing the trouble and initiating repair as well as the person performing the repair operations. At least in certain cases, negotiation of meaning can thus indeed increase the incidences of learning and possible drive interlanguage development forward.

6.3.2 Conclusion: Some Pedagogical Considerations

I will conclude this dissertation with some final considerations on the pedagogical implications of this study. As was discussed in chapter 1, because repair is a mechanism to resolve troubles in a conversation, it is important for learners of a target language to know how to initiate repair and deal with such troubles. Overall, the data has shown that in naturally-occurring interaction, students do initiate repair freely and in a relatively, albeit more limited, target language-like manner. Due to the fact that there was no overt instruction in repair mechanisms in the learners' regular L2 curriculum, it is likely that positive L1 transfer plays a role in these learners' use of the repair mechanism, enabling them to deal with troubles they encounter in the target language and to do so in a fairly native-like fashion. Thus, it is possible for these learners to operate on a certain level of native-like ability in the organization of repair, even in the absence of explicit instruction. However, the data demonstrated that the study abroad group was decidedly more native-like in their repair behavior than the other groups. Specifically, students in the study abroad group use a broader variety of repair initiation and operation techniques than those

who did not study abroad, deal with different and more native-like types of troubles, and resolve troubles more efficiently, all of which cause them to appear more native-like in their use of the repair mechanism. As both university-based groups are different from this group, the question of whether this behavior can possibly be taught in the classroom presents itself. While the data for this dissertation does not provide an answer to this particular question, there are nevertheless some pedagogical implications that can be inferred from the results of the data.

First, in a finding significantly different from research in comparable groups of students (Egbert, 1998; Liebscher & Dailey-O'Cain, 2003), the data showed that students use a large number of non-specified repair initiations. This suggests that while learners in all groups participating in this project were able to use non-specified repair initiations in naturally-occurring interaction, students may choose not do so in certain situations, which appear to include classroom interaction (Liebscher & Dailey-O'Cain, 2003). In this dissertation, however, I have demonstrated that otherinitiation of repair, including those sequences featuring non-specified repair initiations, can lead to linguistic learning experiences for the students. It is possible, then, that in certain situations, e.g., in the classroom, learners may choose not to initiate repair instead of employing a non-specified repair initiation and thus forego a possibly valuable learning experience. This suggests that it may be useful to instruct learners in the types of repair initiation techniques frequently used by native speakers, which should include the acceptability of non-specified repair initiations. 52 While the data indicates that a certain level of language ability is necessary for certain types of

repair initiations to appear (e.g., those including question words), non-specified repair initiations appear in all groups and are thus likely less affected by the level of language ability in the learners. It should be noted, however, that while learners in this project use non-specified repair initiations frequently, particularly lower-level learners often use them in instances (i.e., with lexical types of trouble sources) where other types of repair initiations (i.e., partial repeats) may be more efficient (partial repeats, however, may not always be possible for these learners if they experience trouble with a word they do not know and may thus be unable to repeat). While this generally leads to more complex repair sequences, it is important to note that they are generally ultimately successfully resolved. Thus, while less efficient in these instances, the non-specified repair initiations still ultimately serve their purpose: resolving a trouble and possibly resulting in a learning experience. At the very least, it would thus appear that it is important to treat non-specified repair initiations as acceptable in the classroom if students use them.

Second, as it is apparent in the data that some types of repair sequences may not only provide important linguistic (particularly lexical) learning experiences for the students, but may also give them the opportunity to increase the complexity of their language output, it is clear that students can benefit from this type of interaction with their peers. This suggests that including types of exercises in the classroom that allow students to engage with their peers in interaction that approximates naturally-occurring interaction (such as, for example, information gap activities) may be important in that it gives learners the chance to experiment with the language in a

comfortable (and apparently perceived as less formal vis-à-vis teacher-student interaction) environment. Noticeably, all learners in the various groups do participate in the conversations in general and in the organization of repair in particular.

Particularly via the mechanism of affiliation that learners appear to adhere to (see chapter 5), they can actively negotiate their beliefs about the target language with the other learners, thereby creating the possibility for lexical (and possibly other types of) learning.

The question of whether, and if so how, repair sequences can or should be explicitly taught to learners is an aspect of other-initiated repair that research has yet comprehensively address. In this dissertation, I have shown that American learners of German already have access to a wide range of repair initiation techniques (likely due to positive L1 transfer); however, I have also highlighted areas where it may be useful to instruct learners in the organization of other-initiated repair. Future research will show whether this is indeed so. This also relates to the question of interlanguage development, a point this dissertation could not, due to its cross-sectional study design, comprehensively address. Specifically, while this dissertation has provided a thorough cross-sectional analysis of the organization of repair in different groups of learners, longitudinal research will be needed to address any development that occurs in the acquisition of repair sequences and it is within the scope of this line of research that questions of whether instructional intervention may be able to influence this pragmatic development may be addressed.

Notes

¹ Shonerd (1994) investigated both self-initiated and other-initiated repair. He found that during self-initiated repair, learners tend to attend to local troubles, i.e., those that deal with the language, while highly proficient speakers, such as native speakers, tend to focus on global troubles, i.e., those that deal with meaning and content. He found a similar focus on troubles with the language (specifically, lexical troubles) for learners engaged in other-initiated repair.

² Furthermore, Kasper and Ross (2007) note that "the real-world predictive validity of such scales [e.g., the ACTFL Proficiency Guidelines] remains undocumented" (p. 2046).

³ This point is not uncontested, particularly among CA scholars, who argue that this presumed connection between the modification of input and language learning lacks empirical validity (Firth, 1996; Wagner 1996, 1998; Firth & Wagner, 1998; Markee, 2000, as cited in Plejert, 2003, p. 87).

⁴ For an account of the differences between conversation analysis and discourse analysis, refer to Wooffitt (2005).

⁵ From Huth (2006, p. 12).

⁶ The entire study abroad program lasted eight weeks and was divided into two parts: a six-week intensive instruction period, followed by a two-week travel period. However, data collection only took place during the six-week instruction period as it was deemed too difficult to set up group video-recordings in hotel rooms during the travel portion of the program.

⁷ There were two students in Group 3, i.e., in the study abroad group, who completed this third semester *Intermediate German I* course immediately prior to participating in the study abroad program. However, no significant differences in repair behavior were observed in these students vis-à-vis the other students in the study abroad program.

⁸ Several recording sessions were conducted in each group; however, only one session from each group, occurring at the end of the semester or the study abroad program, respectively, was used for the final analysis.

⁹ Repair sequences are also the only type of sequence that can occur anywhere in a conversation, i.e., after any turn, regardless of what type of turn it may be (Schegloff, 1990-1993, as cited in Egbert, 2002, p. 155).

¹⁰ Variations to this structure are, of course, possible. For example, under certain conditions, repair may be initiated from positions other than the ones indicated here; however, here, I will limit myself to these basic positions.

¹¹ These excerpts are simplified for the purpose of illustrating the types of other-initiations.

¹² While Egbert does not count these expressions as repair initiations (2002, p. 153), Selting (1988) refers to these sequences as instances of 'problems of expectation' (p. 299), i.e., a problem *is* present.

¹³ Generally, transcript excerpts in this dissertation will show two lines: the original utterance in German and a word-by-word translation into English. Where the meaning of the utterance may not be immediately obvious from the literal English translations, a third line will occasionally be provided, showing a more idiomatic English translation.

¹⁴ Translation (mine): The speaker selects the most specific form in order to offer to the trouble source turn speaker the best possible help with identifying the trouble source.

¹⁵ Drew (1997) refers to these repair initiations as 'open' class repair initiators.

¹⁶ Particularly interesting in this regard is Egbert's (1998) study. In her data she found evidence of a repair initiation "*Entschuldigung*". This is a direct translation of the English '*Excuse me?*'; however, while the English form *can* function as a repair initiation, the German cannot. Thus, this is clear evidence of L1 transfer, i.e., transferring a native language strategy into the target language. 'Excuse me?', however, is a non-specified type of repair initiation in English; thus, there *is* evidence of the learners in Egbert's study using a non-specified repair initiation, albeit none that occurs in German. It is possible that learners perceived this particular non-specified repair initiation as more formal than the more typical 'hm?' or 'what?' and thus possibly more appropriate to the interview testing situation in which Egbert's data were taken.

¹⁷ In a small number of cases, the type of trouble source could not definitively be determined. This occurs, for example, in cases where a repair initiation is ignored, often making it impossible to determine the type of trouble present.

¹⁸ A change-of-state token generally functions to acknowledge new information and display a change (from non-knowledge to new knowledge) in the speaker's state of knowledge (see Heritage, 1984).

```
[Woolley, 2002, as cited in Seedhouse, 2004, pp. 160-161]
```

```
and if er the rules e:r were e:r easier
in the sense you can (0.2) hire or .hhh suck off people
(1.0) e:rm=
21 → T: =what did you say?
```

This may help explain why this type of repair initiation is common in the learners in this study; it is possible that explicit questions were extensively modeled in the classroom.

¹⁹ As a reminder: Group 1 is the second semester German class, Group 2 is the third semester German class, and Group 3 is the study abroad group.

²⁰ This finding is not unique to studies investigating learners of German. For example, in a study involving first- and second-year learners of Spanish, Buckwalter (2001) found a similar preference for other-initiated self-repair to operate on lexical trouble sources (p. 390).

²¹ Neither 'blügen' nor 'mügen' are existing words in the German language. Rather, it appears that Richard is attempting to sound out (Buckwalter, 2001, p. 387) the word he is searching for.

²² Italian for 'what?'

²³ "Try-marking" refers to rising intonation in a given lexical item (van Lier, 1988, p. 202).

²⁴ Word searches occur in "cases where a speaker in interaction displays trouble with the production of an item in an ongoing turn at talk" (Brouwer, 2003, p. 535).

²⁵ The other more specific repair initiation Alison could have used in this excerpt would have been an explicit question. However, these can also be complex, as they often require the production of new and independent language; for this reason, Alison may have preferred the non-specified repair initiation she eventually offers.

²⁶ Other instances of partial repeats also appeared in excerpts (8), (18), (21), and (23), although not necessarily exclusively.

²⁷ Although explicit questions are not generally part of the repair initiation classification system after Schegloff et al. (1977), they are not uncommon in particular contexts, specifically, in the language classroom (see e.g., Seedhouse, 2004):

²⁸ The *Zwinger* is a palace in the eastern German city of Dresden.

²⁹ The *Frauenkirche* is the *Church of Our Lady* in the eastern German city of Dresden.

³⁰ In contrast to Group 3, where non-specified other-initiations are also common, but tend to appear in response to sequential problems.

³¹ See excerpt (6) in section 2.3.2 for an example of such a 'correction'. For reasons discussed in section 2.3.4, however, such other-initiated other-repair sequences are not subject of this dissertation. They were also extremely rare in the data.

³² See page 91 for the complete excerpt.

³³ Word searches occur in "cases where a speaker in interaction displays trouble with the production of an item in an ongoing turn at talk" (Brouwer, 2003, p. 535).

³⁴ See section 6.3.1 for the extended segment.

³⁵ It is likely, however, that they are related to a longer (as compared to native speakers) processing time required by these speakers to formulate an appropriate response (see Wong, 2000).

³⁶ The categories of 'explanations', 'repetitions', and 'acknowledgment' each also contain those occurrences in which a particular pattern occurred together with another pattern, i.e., a repair operation containing both a repetition and an acknowledgment was counted in both categories. Where the form of the repair operation was not clearly determinable, it was classified as ambiguous, a relatively rare occurrence. Repair sequences in which the repair initiation was ignored or no repair operation is otherwise evident were not counted. While the nature of such sequences may be insightful to investigate, this shall not be undertaken in this work.

³⁷ Other examples of this also occurred, among others, in excerpts (21), (28), or (9). For other *types* of explanations, see excerpts (25) and (11) for examples of translations or excerpt (26) for an example of an expansion.

³⁸ An exception are those instances where the person initiating the repair is also the person doing the repair operation (see except (31) for an example).

³⁹ Other examples have already been seen in excerpts (18) and (20), as well.

⁴⁰ As discussed in chapter 3, these speakers may also have more advanced linguistic tools at their disposal, thus enabling them to choose from a wider range of repair initiations and tailoring their repair initiations more specifically to the type of trouble encountered.

- ⁴¹ The only true multiple in Group 1 not occurring after a non-specified repair initiation that was issued in response to a lexical type of problem occurs because the initial repair initiation was ignored, i.e., no repair operation is performed.
- ⁴² Lines a, b, and 00 were added to this excerpt in order to show how this conversation initially (i.e., prior to line 01) unfolded. In previous occurrences of excerpt (9), these lines were not necessary to illustrate the point in question and were thus eliminated.
- ⁴³ This is particularly evident in instances where speakers initiate repair in order to join a conversation, a phenomenon previously described by Egbert (1997). In those instances, the repair initiations themselves serve to affiliate a speaker with a group.
- ⁴⁴ The analysis of this sequence also supports Svennevig's (2008) thesis that speakers may treat problems as less serious problems of hearing or understanding before they treat them as more socially serious problems of agreement. Specifically, it is possible that Daphne in this sequence already knows or suspects that the word 'deutsch center' initially used by Steve is not the correct word (in fact, this is likely, as she is able in her second repair initiation to supply the correct word). The problem then is a problem of agreement (on the correct word to use) and not really of understanding. However, due to the strong dispreference for other-initiated other-repair (i.e., overt correction), Daphne issues only an other-initiation (thus giving Steve the chance to self-repair) in the form of a partial repeat, which Steve initially treats as an understanding check (i.e., as essentially a problem with hearing or possibly with understanding), rather than a disagreement. However, it later turns out to have been a problem with agreement. This socially sensitive situation helps explain why Steve subsequently seeks to reaffiliate with the group, not only to establish mutual understanding in general, but also particularly to reaffirm his own membership in this group of mutual 'understanders'.
- ⁴⁵ Negative L1 transfer occurs when a strategy from the L1 (i.e., the native language) is used in the L2 (i.e., the target language), where, however, this results in an incorrect or non-target language-like form or usage.
- ⁴⁶ Positive L1 transfer occurs when a strategy from the L1 (i.e., the native language) is used in the L2 (i.e., the target language) and results in a target language-like form or usage.
- ⁴⁷ For the purposes of this dissertation, I have determined this classification to be useful. However, it is likely of a preliminary nature and may need to be differentiated in more detail in future research.

⁴⁸ However, repetitions have been shown to frequently occur after non-specified repair initiations (Egbert, 2002; Svennevig, 2008) and can thus be considered an established category.

⁴⁹ It is possible that this is another reason why explicit questions have not been documented as such in native speakers of German (although the fact that they may have been classified as partial repeats plus question words may also play a role). The fact that, in the data, explicit questions primarily occur in multiples may be evidence that they are not very efficient and may thus not be commonly found in native speakers, who tend to resolve troubles very efficiently (Egbert, 2002; Schegloff et al., 1977).

⁵⁰ Alternatively, it is possible that the mechanism (or parts thereof) in its basic structure may be a universal feature of the organization of repair (i.e., may be context-free), but that it may also vary with context (i.e., it is also context-sensitive), which could also explain some of the observed differences.

⁵¹ It is possible that the motivation of individual speakers may play a role in this respect. In particular, Daphne (in Group 2) is the only speaker for whom *two* such successful learning sequences could be identified in the data. Considering that Daphne has also previously been identified as a speaker who may be particularly ardent in pursuing the resolution of trouble she is experiencing (see discussion on page 152), it is possible that a particular speaker's personal level of motivation to resolve trouble and possibly learn new items may be a significant factor in this respect. However, too few examples are available in the data overall to definitively answer this question.

⁵² However, the research results by Egbert (1998) and Liebscher and Dailey-O'Cain (2003) clearly suggest that while learners are able to use them, they may be reluctant to use non-specified repair initiations in situation they may perceive as more formal than naturally-occurring everyday conversation and instructors may want to address this point in any overt treatment of non-specified repair initiations.

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Appendix: Data Excerpts

This appendix lists all excerpts from my data (excerpts taken from other sources are not included) that I use in the dissertation to illustrate various points. When they are used as an example in the text, they may not always be shown in their entirety. This appendix is designed to allow for easy reference to complete data segments if readers desire to supplement data excerpts in the text with additional information.

(8) [Esperanto, Group 1, simplified]

```
01
     Richard:
                .h du sollst esperanto lernen hehe
                 .h you should esperanto learn hehe
                you should learn esperanto
02
                 (.)
03
     Linda:
                hm?
04
                du- du sollst- auch esperanto lernen heh.hh
     Richard:
                you- you should- also esperanto learn heh
                you should also learn esperanto
05
     Linda:
                esperanto,
06
     Richard:
                .h ist die: (.) ääh internal-
                .h is the uuh internal-
                is the international
07
                internaschion:alisch
                internationalish
80
                (0.4)
09
     Linda:
                00 [ h
                   [mund heh
10
     Richard:
                   [mouth heh
                    language
11
     Linda:
                mheh .h ja
                mheh yes
```

(9) [Karl, Group 2]

```
a Rachel: kennt ihr eddie izzard
know you eddie izzard
Do you know Eddie Izzard?
```

```
[Lacy nods head
b
      Lacy:
                  .h [jaa
                      [yes
                  Meg directs eye-gaze at Lacy
                   [Meg shakes head
                  [°nein°
00
      Meg:
                   [ no
                                                        [Ra. moves eye-
                                                             gaze to Da.
                   [eye-gaze at Lacy [Meg directs eye-gaze[at Rachel
01
      Rachel:
                   [ich denke dass [karl, (0.2) ist [wie eddie
                        think that [Karl
                                                   is l[ike Eddie
                  [I
02
                  izzard=
                  Izzard
                  eye-gaze directed at Rachel
03
      Lacy:
                  =ehehe[he
                             [Meg moves eye-gaze to Lacy and nods head
04
                          [eh[ehehe[he
      Meg:
                             [eye-gaze directed at Rachel
05
      Steve:
                             [wer? [wer?
                              who? [who?
06
      Lacy:
                                    [ehehe[he (.) [(cough)hehe
07
      Daphne:
                                           [wer ist[
                                           [who is [
                                                    [eye-gaze directed
                                                     at Steve
08
      Rachel:
                                                    [(ka::r[l)
                                                            [to Rachel
09
      Steve:
                                                            [karl
                                                            [karl
                        [to Meg
10
                  is[t [ist
                  is[ [is
                     [to Rachel
                                   [to Steve
11
      Daphne:
                     [>wer ist-< [wer ist-=
                     [ who is
                                   [who is
                  to Steve
12
      Rachel:
                  =wie: eddie izza[r[d[.
                    like eddie izza[r[d[
                                     [to Rachel, nods head
13
      Lacy:
                                     [>[e[ddie izzard<</pre>
```

```
[La. moves eye-gaze to Anne
                                       [to Lacy[
14
                                       [w[er [ist eddie izzard
      Anne:
                                       [w[ho [is eddie izzard
                                                   [S. moves eye-gaze from
                                                    Ra. to Da.
                                         [to Rachel [
15
      Daphne:
                                         [wer ist [er
                                         [who is
                                                   [he
                  [Lacy quickly moves eye-gaze from Daphne to Rachel
16
      Lacy:
                  [.hh
                  to Lacy
17
      Daphne
                  >er ist-<=
                   he is
                  to Daphne
                                 [Da. moves eye-gaze back to Rachel
                  =he's like, ([.) (°karl°) (.) (ein bischchen),
18
      Rachel:
                   he's like
                                       karl
                                                      a little
                                 Γ
                       [eye-gaze to Lacy, smiles
                  (.) [I think, a little bit
19
                  to Rachel
20
      Daphne:
                  ein musician?
                     musician?
                                 [Lacy moves eye-gaze to Rachel
21
                  .h [(.) nein [ähm
      Lacy:
                          no
                                 [uhm
                             [Rachel moves eye-gaze to Lacy
                      [to Daph [ne
                                                      [Ra. moves eye-gaze
                                                       back to D.
22
      Rachel:
                      [no er[ ist em (.) kom[- komi[sch
                      [no he[ is um
                                           fun[- funn[y
                                               [to Rachel
23
                                               [k- komi- komisch
      Lacy:
                                               [f-fun-funny
                     [to D., nods
24
                  kom[isch j[a
                  fun[ny ye[s
25
      Rachel:
                              [ja
                  to Rachel
26
      Meg:
                  aha=
                  to Rachel, Anne moves eye-gaze to Daphne
27
      Daphne:
                  =hah=
                  to Steve and Anne, Anne moves eye-gaze to Meg
28
                  =hahaha[ hah[a
      Meg:
```

[to Meg, Meg moves eye-gaze to Lacy 29 Lacy: [haha[ha [to Meg[moves eye-gaze to Lacy 30 Anne: [ehe:h[(10) [Bean, Group 3] Clint: oh. sean bean. 02 (.) 03 Sally: sean (was)? sean what? (11) [Lass uns, Group 2, simplified] Rachel: lass un:s (.) etwas machen let us something do let us do something 02 Daphne: [lass uns? [let us? 03 Meg: [m hm (.) [ja [m hm [yes 04 Rachel: [lass- (.) [lass uns lesen lass uns [let us read let us 05 Daphne: [was ist lass uns [what is let us? 06 Rachel: (si[tz-)si[t-07 Meg: [ja, ja, lass uns [yes yes let us 08 Rachel: jа yes 09 Anne: was bedeutet la[ss uns

le[us

[let's

what does let u[s mean?

what means

10

Rachel:

(12) [Tina, Group 2]

01 Meg: wie reagiert (.) was äh äh <u>denkt</u> sie how reacts what uh uh thinks she how does she react, what does she think?

02 (1.5)

03 Steve: was denkt sie über die tina ist (.) weg? what thinks she about the Tina is gone?

what does she think about Tina being gone?

04 Meg: ja hah

yes heh

(18) [Sauce, Group 3]

01 Monica: und die soße,

and the sauce

02 (0.3)

03 Monica: DAS schmeckt.

that tastes

that tasted good

04 Kacey: die [soße? mit de[:r mit der [brot

the [sauce? with [the with th[e bread

05 Clint: [the s:auce w[as [

06 Adam: [die: [weiße soße?

[the [white sauce?

07 Monica ja, [die wei[ße soße

yes [the whi[te sauce

08 Kacey: [jaa das[war gut

[yes tha[t was good

09 Adam: [ja

[yes

(19) [Beach, Group 3]

01 Clint: mikes v- gastvater auch sagt dass er (0.2)

mike's f- guestfather also says that he

mike's hostfather also says that he

02 fahren (0.2) äh (.) auto fahren kann.

drive uh car drive can

can drive, can drive a car

03		[Clint lowers eg	ye-gaze onto	o table	
04	Monica:	0 [k			
05	Sally:	<pre>[wer is[:t, (.] [who is[[who is[going</pre>	go		
06	Zack:		o? (.) nach re? to		in? reto?
07		[C1. lifts head (0.[3)	d and turns ey	e-gaze to .	Za.
08	Adam:	[gaze to Sa. [viele, (0.2) [many	Clint:	hm?	
09		I guess guess	Zack:	wo? (.) where?	-
10			Clint:		[ääh [<i>uuh</i>
11				(<i>I</i> =an:) <i>I an</i>	ich hhh
12					ab immer ave always
13				forgotte	en den name en the name vs forget e)

(20) [Oma, Group 2]

01	Meg:	<pre>wie rea[giert (.) was äh äh how rea[cts</pre>	h[thinks she
02	Steve:	[mhm	[
03	Daphne:		[denkt [<i>thinks</i>
04		(1.5)	
05	Daphne:	hm?=	
06	Steve:	=was denkt sie über die tin what thinks she about the what does she think about T	Tina is gone?

07	Meg:	ja hah= yes heh
08	Steve:	=sie: she
09		(.)
10	Meg:	hah ha[.h
11	Steve:	[she doesn't care
12	Meg:	jaa hahahahahaha yes hehehehehe

(21) [Davai, Group 2, simplified]

() [-	,	, 		
01	Meg:	ääh was bedeute uuh what means how do you say	um uh	in german uh
02		davai? davai		
03	Daphne:	davai?		
04	Rachel:	davai?		
05	Daphne:	ist das is that	Meg:	eheh ja. auf yes in
06		russisch? russian?		deutsch german
07			Rachel:	n[ein n[o
08	Daphne:	was ist das what is that?	Meg:	[ich hab- (.) [I hav-
09				nein, no?
10			Rachel:	hm mh huh uh
11	Meg:	davai? em (.) e davai? um i		.) ää[h (.) hm uu[h hm
12	Daphne:			[russisch ja? [<i>russian yes?</i>
13		ein russisch wo a <i>russian wo</i>	=	
14	Rachel:		[lass un:s	(.) etwas machen something do

```
15
     Daphne:
                 [lass uns?
                 [let us?
16
     Meg:
                 [m hm (.) [ja
                 [m hm
                            [yes
17
     Rachel:
                            [lass- (.) [lass uns lesen lass uns
                            [let-
                                       [let us read let
18
     Daphne:
                                       [was ist lass uns
                                       [what is let us?
19
     Rachel:
                 (si[tz-)
                  si[t-
                    [ja, ja, lass uns
20
     Meg:
                    [yes yes let us
21
     Rachel:
                 jа
                 yes
22
     Anne:
                 was bedeutet la[ss uns
                 what means
                              le[ us
                 what does let u[s mean?
23
     Rachel:
                                 [let's
24
                 let's
     Meg:
25
     Rachel:
                 jа
                 yes
26
     Daphne:
                 let us?
27
     Rachel:
                 jа
                 yes
28
     Meg:
                 j[a
29
     Rachel:
                 [davai auf russisch ist (.) lass uns auf
                   davai in russian is
                                                let
                                                     us
                                                         in
30
                 deutsch
                 german
31
                 (.)
32
     Daphne:
                 00[h
33
     Anne:
                   [lass uns
                   [let us
34
     Meg:
                 lass uns
                 let us
                 [swings bent elbows forward
35
     Daphne:
                 [DAVAI
36
     Lacy:
                 eheh
```

37 Daphne: ja yes

(22) [Selenstrand, Group 3, simplified]

01	Clint:	[gaze to Nick [ääh (I=I'm)[(.) ich[hhh [uuh I I'm I [
02	Monica:	[gaze to C [points finger at C. [oh sie [hab[en gesagt.=em [oh they[ha[ve said um
03	Clint:	[gaze to Z [>hab immer [have always
04	Clint:	<pre>[gaze to M vergessen [den na[me< forgotten [the na[me</pre>
05	Monica:	<pre>[gaze to C [see- (.) se[len, [see- se[len</pre>
06	Clint:	[to Z [gaze to C [of the [strand. [of the [beach
07		(1)
08	Monica:	[shakes head[waves hand & gaze to N seensta[dt, (.) [or some- [egal. seensta[dt [or some- [doesn't matter]
09	Nick:	[gaze to C [selenstrand oder [selenstrand <i>or</i>
10		was, what
11		(0.2)
12	Clint:	[gaze to N [oh ja [see- or s: [oh yes[see- or s
13	Kacey:	[gaze to M [du gehst? [you go? [you're going?

14	Monica:	<pre>[to Z [to K [(dies-[) huh? [this- [huh?</pre>		
15		(.)		
16	Kacey:	du gehst? you go? you're going?	Clint:	was=was? what was?
17			Nick:	selenstran[d,
18	Monica:	hoffentlich hopefully	Clint:	[selen
19		jaa <i>yes</i>		strand ja. strand yes

(23) [Family Guy, Group 1]

· / L		• 1
01	Richard:	<pre>.h family guy ist (.) ist gu(t) ist eeeh .h family guy is</pre>
02		(blügen)? er (.) (mügen)? blügen er mügen?
03	Linda:	°(müll)°? garbage?
04	Alison:	[uhm
05	Richard:	[(müll) jetzt garbage now
06		(0.3)
07	Marc:	was? what?
08	Richard:	ehm [(.) tired heh uhm [tired heh
09	Sam:	[che? [what?
10	Alison:	eheh[h.h
11	Marc:	[müde?= [tired?
12	Richard:	=müde: [jetzt tired [now
13	Alison:	[jaaa [<i>yes</i>
14		(.)

(24) [Lesen, Group 1]

01	Alison:	fernsehen, (.) oprah, watch TV oprah
02		(.)
03	Linda:	HAHAHA .mh ahahaha .h
04		(0.4)
05	Linda:	<pre>[mit (.) george clooney? [with george clooney?</pre>
06	Marc:	[hast du: [have you
07		(.)
08	Alison:	ts <u>nei[n</u> ts no [
09	Linda:	[oh
10	Marc:	<pre>[to Alison [hast du [gelesen? have you[read?</pre>
11	Linda:	[that's the one my roomma[te was
11 12	Linda: Alison:	[that's the one my roomma[te was [hmmm?
12	Alison:	[hmmm?
12 13	Alison: Linda:	[hmmm? watching [to Alison [hast du gelesen?
12 13 14	Alison: Linda:	[hmmm? watching [to Alison [hast du gelesen? [have you read?
12 13 14 15	Alison: Linda: Marc:	<pre>[hmmm? watching [to Alison [hast du gelesen? [have you read? (1) gelese[n?</pre>
12 13 14 15 16	Alison: Linda: Marc: Alison:	<pre>[hmmm? watching [to Alison [hast du gelesen? [have you read? (1) gelese[n? read [</pre>
12 13 14 15 16	Alison: Linda: Marc: Alison:	<pre>[hmmm? watching [to Alison [hast du gelesen? [have you read? (1) gelese[n? read [</pre>

21 Marc: [lesen [to read]
22 Alison: oh JA JA ich äh (0.7) ich lese (.) zwei oh yes yes I uh I read two
23 büche(nt) books

(25) [Book, Group 2]

es war[trist? ja? 01 Rachel: it was[sad? yes? 02 Steve: [ja [yes 03 (0.5)04 Lacy: mh[m mh[m 05 Daphne: [ja [yes 06 Anne: jа yes 07 Lacy: [(ja) [(yes) 08 Rachel: [un[d deprimiert [an[d depressed 09 Meg: [<u>ja</u> [yes 10 [mmhm Lacy: [mmhm]11 Daphne: [deprimiert? [depressed? 12 Rachel: [it's depres[sing heh 13 Lacy: [mhm [mhm [14 Daphne: [oooh (.) ja [oooh yes

(26) [Clerks, Group 3, simplified]

nein äh alt- alterer (.) film. 01 Kacey: no uh old- older film 02 Zack: cler[ks zwe[i? cler[ks two[? 03 Clint: [oooh. [j[a? [oh [y[es?04 Kacey: [ja [yes 05 (1)clerks? (.) clerks? 06 Zack: 07 (2) 08 Clint: clerks? 09 Zack: [clerks zwei (.) kommt [clerks two comes 10 Monica: [clerk-11 Clint: aa[h 12 Monica: [n:a:h (das: wird) [(.) [SCHLECHT sei:n. [n:u:h (that will) [[bad be [that will be bad 13 [ich habe problem(e) mit Clint: [I have problem(s) with 14 der erste clerk[s. the first clerk[s

(27) [Daylight, Group 3, simplified]

01	Monica:	[Monica gestures air quotes] ja ANDERE EM [ende ders welts, (0.8) filme war yes other um [end of the world films
02		besser. (0.4) als- were better than
03	Adam:	[to Monica [deep impa[ct?
		[M.& K.
		turn to N.
		[to Adam [points at Adam [
04	Monica:	[armaged[don.=das[w[ar besse:[r,
		[armaged[don tha[t [was bette[r

05	Clint:		<pre>[to Zack [jaa. ich h[abe das (gesehen [yes I h[ave that (seen [Yes, I hav[e seen that.</pre>
06	Nick:		[to Adam [und <i>daylight,</i> [<i>and daylight</i>
07	Clint:	<pre>da:s,) that)</pre>	
08	Adam:	[to Nick [hu:[h?	
09	Zack:	[OH JA JA (.) [oh yes yes	[ja (.) ich habe= [yes I have
10	Kacey:		<pre>[und was? [and what?</pre>
11	Nick:	[to K[acey [=da[ylight	
12	Zack:	[°das (gehö[rt [that hear[d	·-°)
13	Monica:	[de	ep impact impa[ct
14	Clint:		[dayligh[t?
15	Nick:		[mor
		gan freeman?=	
16	Monica:	=ääh (was noch). uuh what else	
17	Clint:	jaa. jaja ja. <i>yes yesyes yes</i>	
18		(0.4)	
19	Clint:	es war besser (.) it was better	als (1.4) armageddon. than Armageddon.
(28) [2	Zwinger, Grou	ıp 3]	
01	Monica:		e in dresden, (0.4) ist (1) Fin dresden is Tesden is
02		ganz (schön). quite beautiful	

03	Clint:	(die) frauenkirche (in dre[sden) the frauenkirche in Dre[sden	
04	Monica:	[<u>besonders</u> [<i>especially</i>	
05		<pre>[(interes[sant) interes[ting</pre>	
06	Adam:	[was ist [der zwinger [what is [the Zwinger?	
07	Kacey:	[die frauenkirche in $\frac{\text{münchen}}{\text{Munich}}$,	
08		(0.2)	
09	Monica:	ää[äh uu[uh	
10	Adam:	[WAS IST DER ZWINGER.=ein museum? oder [ein [what is the Zwinger? a museum or [a	:
11	Monica:	[ähm [<i>uh</i> m	
12		ein festplatz mit garten un:d (0.2) em a fairground with garden and um	

(29) [Literatur, Group 2, simplified]

01 Rachel: es war (.) nicht literatur eh hehe it was not literature eh hehe

(30) [Kleider, Group 2, simplified]

01	Rachel:	er trägt äh .h °em (kleid:)° (.) äh[[frauen: he wears uh em (dress) uh[[women
02	Meg:	[u[h uh-,
03	Rachel:	[head to toe and back [hehe
04	Meg:	[u:h
05	Lacy:	[heh hehe[he[he
06	Meg:	[eh[ehh

```
07
     Daphne:
                              [trägt frauen? frauen ( [ ,)
                              [wears women? women (
                                                       [ )
08
                                                         [kleider.
     Meg:
                                                         [clothes.
09
     Rachel:
                 kleider, ja
                 clothes yes
(31) [Bären, Group 1]
01
     Sam:
                 aber keine f- ääh (baren),
                 but no f-uuh bears,
02
                 (1.2)
03
     Marc:
                 baren?
                 bears?
04
                 (1)
05
                 baren. jaa[a
     Marc:
                 bears. yes[
06
     Sam:
                            [eheh
                                              [to Rich. [to Marc
                                  Linda:
                                              [wa:m:? [wa:rem? er
07
     Richard:
                 baren?
                 bears
                 bare[n?
08
     Sam:
                 bear[s
09
     Richard:
                     [jahhh
                     [yes
10
                 [ (.) eheh
                                  Marc:
                                             BAR
11
                                              bear
                 [
12
                 [bären?
     Sam:
                 [bears
13
                 maybe it's
     Sam:
                                             barEN
                                  Marc:
14
                 bären
                                             bears
                bears
15
     Richard:
                 (woooaach)
                         [gestures a bear clawing at someone
16
     Marc:
                 äh (.) [RAR RA[R RAR [heh[ehe
17
     Linda:
                               [oh ooo[oh [
     Richard:
18
                                       [ehe[hehe
```

```
19
     Sam:
                                           [ehehehe hahaha
20
                 (.)
21
     Linda:
                 (ist das,)
                  is that
22
                 (0.2)
                 °ja°
23
     Marc:
                  yes
24
                 die w- wörter? (.) für
     Linda:
                 the w- words
25
                 (.)
26
     Marc:
                 jaa
                 yes
27
     Linda:
                 ah
28
                 (.)
29
     Linda:
                 ok
                 be: (0.5) a umlaut
30
     Marc:
                 be
                           a umlaut
31
     Linda:
                 oh
32
     Marc:
                 er[r
                 ar[
     Linda:
33
                   [bäre
                   [bears
34
                 (.)
35
     Marc:
                 jaa
                 yes
                 mhm [(die) bären
36
     Marc:
                 uhu [ the bears
37
     Richard:
                     [dieses wann: (.) ä- unse:r kultur er
                     [this
                                        uh our culture er
                              was
38
                 projekt eheh
                 project eheh
39
     Linda:
                 ja hh
                 yes
```

(32) [Flavor ice, Group 1, simplified]

```
01 Marc: ich ess[e ääh (1) popeis I eat[ uuh pop ice
```

```
02
                 (.)
03
     Linda:
                 OOH [nicht
                 ooh [not
04
     Alison:
                     [ooh (.) flavoreis?
                     [ooh
                             flavor ice?
05
     Marc:
                 jaa
                 yes
(33) [Juli, Group 3, simplified]
     Monica:
                vielleicht für: em (0.2) vierten:: (.) juli,
                       for um
                maybe
                                          fourth
                                                         july
                 (1.2)
02
03
     Kacey:
                 jaa[a
                yes[
04
     Clint:
                    [vierten?
                    [fourth
05
     Clint:
                oh.
06
                 (1.4)
     Clint:
07
                 ja.=
                yes
08
                 =ja
     Kacey:
                 yes
09
     Monica:
                 °independence day,°
10
                 OOOH ok.
     Adam:
11
                 (0.2)
12
     Adam:
                 ich verstehe (.) jetzt
                 I understand now
(34) [Office, Group 2]
                 to Daphne
01
     Steve:
                 nein em weil (.) die deutsch (.) center (.)
                 no um because the german center
                 No, because the (German Department's) office
```

nicht (.) öffnet (.) jetz[t

is not open now.

opens

now [

[

not

02

03	Daphne:		<pre>[to Steve [waas? (.) [what?</pre>			
04	Steve:	to Daphne ja= <i>yes</i>				
05	Meg:	to Steve =ha[hhh h[aha				
06	Lacy:	[to Meg[[Meg n [hahah[a[haha		e to L	acy	
07	Daphne:	[das [}		ves eye	e-gaze to Rachel	
08	Rachel:	[(to Daphne [Me das bü[r[o the of[f[ic		s eye-gaze to Da.	
09	Daphne:		[bür[chel [a:	a. moves gaze to St. nd nods head .) ok ok	
10	Meg:		[to Dap büro. offic	.h	
11	Daphne:	to Steve aaa[ah				
12	Steve:	= =	(.) ni- ni[cht c		
(35) [Schildkröte, Group 2, simplified]						
01	Rachel:	ich habe (.) sch I have tu	hildkröten rtles		[schildkröten [turtles	
02	Daphne:	i nave ea.	10100		[o- sch-=sch- [o- sh- sh-	
03	Rachel:	[iund sie sind [i [and they are [s		all wi	th hands	
04	Daphne:	[schil- wie? [shil- how				

05	Rachel:	schild <u>kröten</u> turtles		
06	Daphne:	[schild krö-		
07	Meg:	[gestures big circle in the air schild [shield. kröten, shield [shield toads]		
08	Daphne:	(crouton)?		
09	Lacy:	ahahaha[haha[ha		
10	Anne:	[ahah[
11	Meg:	[toad.		
12	Daphne:	>sorry<=		
13	Anne:	=toa[d.		
14	Daphne:	[oh right. [schild kröten? [oh right [toads		
15	Rachel:	mhm uhu		
16	Daphne:	wie viel? how many		
17	Rachel:	zwei <i>two</i>		
18	Daphne:	zw[ei tw[o		
19	Rachel:	<pre>[und sie sind klein [and they are small</pre>		
20	Daphne:	was sch:ild krö[ten? what toads		
21	Rachel:	[weiß nicht ahahh [know not <i>I don't know</i>		