INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction..

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

ProQuest Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600

University of Alberta

Self-Repair Strategies of English-German Bilinguals in Informal Conversations: The Role of Language, Gender, and Linguistic Proficiency

by

Caroline Lea Anne Marie Rieger 

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Doctor of Philosophy

in

Germanic Language , Literatures, and Linguistics

Department of Modern Languages and Cultural Studies

Edmonton, Alberta

Fall 2000

University of Alberta

Library Release Form

Name of Author: Caroline Lea Anne Marie Rieger

Title of Thesis: Self-Repair Strategies of English-German Bilinguals in Informal Conversations: The Role of Language, Gender, and Linguistic Proficiency

Degree: Doctor of Philosophy

Year this Degree Granted: 2000

1401-1 Michener Park
Edmonton AB T6H 4N1

August 15, 2000

Abstract

This thesis investigates self-repair strategies as one aspect of the conversational style of bilinguals on the basis of English and German conversational data. The investigation combines a quantitative analysis with a qualitative analysis situated within the framework of interactional sociolinguistics with its basic assumption that interlocutors rely on socially and culturally informed strategies, shared knowledge, contextualization cues, conversational involvement, and conversational inference to convey and interpret meaning in conversations and other social interactions (Schiffrin, 1994, p. 98). The sociolinguistic analysis of English and German conversations by the same bilingual speakers allows the researcher to distinguish between universal conversational strategies, individual conversational strategies, and those conversational strategies that are linked to the particular language of English or German. The main focus of this study is the description of self-repair strategies and variations in these strategies related to the language in use, to the speaker, and to the gender of the speaker and of the addressee.

The analysis of the data reveals that conversational style with respect to self-repair strategies changes depending on the language spoken and on the gender of the speaker and the gender of the interlocutor. Some individual strategies observed in self-repairs are not affected by these factors, but others are. Moreover, the investigation shows that the level of proficiency in the language spoken is an additional important variable in the production of self-repair strategies.

The study concludes with suggestions for the teaching of self-repair strategies in the second language classroom and for the development of teaching materials which may assist in successfully integrating fillers into the teaching of German or English as a second language and which thereby provide language learners with a useful tool for more fluent, proficient and pragmatically correct L2 communication. Finally, recommendations are made for future research on self-repair strategies and on the conversational style of bilingual speakers.

University of Alberta

Faculty of Graduate Studies and Research

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled *Self-Repair Strategies of English-German Bilinguals in Informal Conversations: The Role of Language, Gender, and Linguistic Proficiency* submitted by Caroline Lea Anne Marie Rieger in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Germanic Language , Literatures, and Linguistics.

Dr. Manfred Prokop, co-supervisor

Dr. Ann P. Penningroth, co-supervisor

Dr. Gary D. Prideaux, committee member

Dr. Jennifer Dailey-O'Cain, committee member

Dr. Lois Stanford, committee member

Dr. Magda Stroinska, external reader

August 4, 2000

in loving memory of

Léon Grisius

Catherine Grisius-Gricius

Catherine Grisius-Schneider

Acknowledgments

I am fortunate to have had many supervisors and advisors during my Ph.D. studies, and I am truly grateful to all of them. I am immensely thankful to Manfred Prokop who has served over the years as teacher, supervisor, mentor, advisor, editor, and *Doktorvater*. His unwavering support and encouragement for all my research and teaching projects has strengthened my confidence and made me a better researcher and teacher. Thank you for all your constructive criticism, your detailed comments and for the many helpful and fruitful discussions.

I am also tremendously grateful and indebted to Britta Hufeisen who over the course of my program became my supervisor, teacher, mentor, and friend and who has given me unfailing support, encouragement, and opportunities for successful collaboration ever since. Unfortunately, geographic distance and bureaucratic obstacles have prevented her from getting the official recognition as the advisor she has truly been for me.

I owe deep gratitude to Gary D. Prideaux for being such a great teacher, advisor, mentor, and member of my supervisory committee and for helping me rediscover my interest in conversation analysis. I am especially grateful for the one-on-one "reading course" that you gave me as well as for all your support and positive influence over the years.

I am grateful to Ann Penningroth who came aboard when the ship was already sailing and nonetheless agreed to serve as my co-supervisor.

To all the other members of my committee, Jennifer Dailey-O'Cain, Lois Stanford, Magda Stroinska, and chairperson, Raleigh Whitinger, I would like to express my sincerest thanks. I was very fortunate to have such a dedicated and supportive committee.

I would also like to extend my warmest thanks to all the others who helped me with this research project, first and foremost, to the eight English-German bilinguals who volunteered their time and participated in the conversations. Many thanks to Patricia Laing and Lee Ramsdell for all their help with the technical equipment and to the Social Sciences and Humanities Research Council of Canada for supporting my research with Award 752-98-1241.

Finally, I would also like to thank the linguistic and academic community at large for discussions, support and encouragement. I especially thank Liz Shriberg, Alice Freed, and Robin Lickley who trusted me with their unpublished manuscripts. And I thank Georg, my parents, Martine, Sandra, Cathrin, Isabelle, Diana, and John for their interest, encouragement, and friendship.

TABLE OF CONTENTS

List of Tables

List of Figures

CHAPTER ONE

INTRODUCTION

1.1 Introduction to conversation analysis

This dissertation investigates self-initiated same-turn self-repair in the conversation of female and male bilingual speakers. Casual conversation as the basic and primary use of language (e.g., Schegloff, 1979, 1988; Fillmore, 1981; Tannen, 1984; Schiffrin, 1988, 1994) has been at the center stage of discourse analysis for several decades. Still, further studies and new approaches are required to comprehend fully these communicative events in which we all engage on a daily basis (e.g., Schiffrin, 1990, 1994; Eggins & Slade, 1997; Givón, 1997). An understanding of the structures and processes of conversation is fundamental to the comprehension of language and its function, first, because conversation is the primary and necessary domain for language socialization and development as well as for the acquisition of communicative competence; second, because everybody engages in conversations on a regular and frequent basis, and with many different people; and, finally, because syntactic changes and processes of grammaticalization are often communicatively motivated. They are found in the processes and emerging structures of conversations and other texts (Schiffrin, 1990, 1994).

Conversation analysis is part of the broader linguistic field of discourse analysis, which has been defined as either the analysis of language usage or as the

analysis of a unit of language larger than a sentence (e.g., Schiffrin, 1988, 1990, 1994). These definitions deal with two major aspects of discourse: the social and cultural context of texts and the linguistic regularities of texts. Both aspects play leading roles in conversation analysis, for conversational structures and patterns are not only the product of linguistic processes but the outcome of social, interactional, and cultural norms as well (e.g., Hymes, 1972c; Burton, 1978, 1980, 1981; Werth, 1981; Brown & Yule, 1983; Tannen, 1984; Schegloff, 1984, 1988, 1992; Sacks 1992; Renkema, 1993; Schiffrin, 1988, 1990, 1994, Chafe, 1994; Stenström, 1994; Eggins & Slade, 1997; Givón, 1997).

1.1.1 Defining conversation

As Schiffrin (1990, 1994) points out, it is surprisingly difficult to define 'conversation' and distinguish it from other speech events, such as discussions and narrations:

> Despite the fact that conversation is an activity in which we all routinely participate, it is surprisingly difficult to define conversation in a way that not only reflects how the term tends to be used in everyday life, but also analytically separates it from other speech activities. [...]
>
> For example, although conversations and discussions might be said to differ in terms of topic structure (conversations allowing more fluid boundaries between topics, and guided less by topic agendas), a conversation can certainly focus on a single topic, just as a discussion can range over a number of (sometimes unexpected) topics. Similarly, although conversations and stories differ in terms of turn-allocation (conversation is typically seen as allowing

> greater opportunities for turn exchange than are stories), many conversationally situated stories require active audience participation. (Schiffrin, 1990, pp. 3-4)

Definitions that do not distinguish between conversations and other speech activities state that conversation is the use of spoken language in an everyday context, or any spoken discourse produced by more than one person (Schiffrin, 1988, 1994). Other researchers avoid distinguishing between the two by not defining the term 'conversation'; instead they give several examples of different interactions that they consider to be conversations (Yule, 1996; Eggins & Slade, 1997).

In the present study, casual face-to-face conversations between two bilingual speakers in an experimental setting will be the focus of attention. For that purpose, casual conversation is defined as an informal everyday collaborative speech event, a dynamic process of constantly and mutually agreed-upon changing of the focus of attention in a verbal interaction which takes place between two or more participants and leads to coherent spoken discourse.

1.1.2 Approaches to conversation analysis

Ever since conversation analysis was developed in the early 1970s, scholars from diverse fields have contributed to this discipline: sociologists, who initiated research in this domain, linguists, language philosophers, psychologists, and anthropologists. All examine different aspects of conversation - the linguistic, the

social, the cognitive, or the cultural - thus generating different approaches to the analysis of speech events (cf. Schiffrin, 1990, 1994).

There is the pragmatic approach, based on Grice's (1975, 1978) ideas about the maxims of cooperation and the conversational implicatures. Both dimensions describe the conditions that speakers and hearers need for their joint action to create mutual understanding. Sperber and Wilson (1995) replace Grice's four maxims by a single one, relevance - a key issue in conversation analysis. Analysts using the pragmatic approach, such as Blakemore (1992), analyze utterances in their context because the pragmatic approach shows readily that utterances contain far more than literal meaning. In doing so, however, they demonstrate a tendency to stress the cognitive part of the context and to ignore its social, cultural and interactional dimensions. An additional criticism of the pragmatic approach is perceived to be its use of constructed data (cf. Schiffrin, 1990, 1994).

A second language-philosophical approach to conversation analysis is based on Austin's (1962) and Searle's (1969, 1976, 1989) theory about language usage according to which speakers perform so-called speech acts. Speech act theory was not created for the purpose of analyzing conversation or discourse, but some of its features lend themselves for use in discourse analysis. For example, some utterances need the hearer's reaction to become a complete speech act, a bet or a promise, for instance. Speech act theory also contributes a methodology to segment spoken or written texts and to define units for the purpose of analysis, since utterances can be

combined or divided according to the speech acts which they convey. The greatest benefit of speech act theory when applied to discourse analysis is the combination of a structural and functional explanation of language usage. At the same time, speech act analysis also limits the explanation of the function of an utterance by only taking into account the functions described by the performative verbs (cf. Schiffrin, 1990, 1994).

The ethnomethodological approach, with which conversation analysis began, is based on the phenomenology of philosopher Alfred Schütz, was further developed by the sociologist Garfinkel, and has been greatly influenced by the research of Jefferson, Heritage, Sacks, and Schegloff. Ethnomethodologists are interested in determining how members of a society produce a sense of social order. Accordingly, they analyze conversations, an excellent source of people's sense of social order. Initially they focused on the 'mechanics' of conversation (turn-taking, repairs, openings and closings), but more recently they have concentrated on the processes of negotiating meaning and comprehension. Their aim is to describe and explain the communicative and interactional competence of ordinary speakers (Schiffrin, 1990, 1994).

A fourth approach, the interactional sociolinguistic approach, is interdisciplinary in nature, combining linguistic, sociological, and anthropological knowledge for the analysis of dis-course. Researchers adopting this approach concentrate on how people from different cultures or social groups use language.

They describe the differences and similarities in the use of linguistic strategies and processes from different angles. This is the approach adopted nowadays by many modern Anglo-American linguists, such as Brown, Goffmann, Gumperz, Levinson, Schiffrin, and Tannen (Schiffrin 1994).

Another approach, the ethnography of communication, derives from anthropology. It employs that discipline's methods of data collection and analysis and shares its interest in holistic explanations of meaning and behavior. The driving force behind this approach was Hymes' (1972a, 1972b, 1972c) suggestion to focus linguistic theory on communicative competence rather than on grammatical competence. Ethnography deals with conversation as one of several culturally organized speech events to discover the meaning and value of conversation for its participants and to interpret them in relation to the culture in which they are produced (Schiffrin, 1990, 1994).

A sixth approach to discourse analysis, the variationist approach, emerged from research in linguistic variation and change. Its theory and methodology were developed by William Labov (1970, 1972a, 1972b). The essence of studies in linguistic variation lies in the supposition that linguistic and social patterns influence these variations, and that they can only be determined through systematic research in language use by a speech community. This research had concentrated on semantically equivalent variants, but was later extended to discourse and pragmatic variants, thus giving rise to the variationist approach to discourse. Variationists

examine patterns of different text levels or analyze how discourse causes lower-level variation (Schiffrin, 1990, 1994).

The psycholinguistic approach to conversation analysis, which is based on experimental psycholinguistics, cognitive psychology, formal and functional linguistic theory and typology, focuses on the organization and structure of conversation by cognitive conditions such as memory constraints, lexical access, processing principles and strategies, and information distribution and management (Prideaux, 1994). Among the many researchers adopting a psycholinguistic approach to conversation analysis are Chafe, Fox, Givón, Lickley, Shriberg, and Thompson.

Another action-theoretical approach to conversation or - as the originators, Fritz and Hundsnurscher (1994), call it - to dialogue analysis was developed in Germany. The main intention of this perspective is to integrate additional action theories that would complement Austin and Searle's speech act theory in the description of speech events (Hundsnurscher, 1995).

Finally, there is the approach to the analysis of conversations of non-native speakers, called interlanguage pragmatics, with interlanguage being the language spoken by non-natives. Interlanguage pragmatics is an area of second/foreign (L2) language study that focuses less on acquisitional patterns of second language learning and more on the second language use (Faerch & Kasper, 1983; Blum-Kulka, 1991; Kasper & Dahl, 1991; Kasper & Blum-Kulka, 1993a, Kasper & Blum-Kulka, 1993b; Kasper & Schmidt, 1996; Kasper & Kellerman 1997). Kasper and Blum-

Kulka (1993b) call interlanguage pragmatics a 'second-generation hybrid' that belongs to two distinct disciplines, viz., second language acquisition research, more specifically an area of interlanguage studies, and pragmatics, "as the study of people's comprehension and production of linguistic action in context" (p. 3). Interlanguage pragmatics concentrates on pragmatic, intercultural, and cross-cultural aspects of second language usage and learning as well as the acquisition of pragmatic and cross-cultural comprehension and production by second/foreign language learners.

Although the above approaches are quite diverse in nature, they can be viewed as mutually complementary rather than mutually exclusive. It is important, however, to integrate the different perspectives into one frame of reference or - as Givón puts it after having described the prevailing dichotomies in conversation analysis - into one approach:

> [The] First is the cleavage between the study of information flow and the study of social interaction. Second is the theoretical division between speech-situation models and cognitive models. Third is the methodological split between the study of spontaneous conversation in natural context and the study of speech production and comprehension under controlled experimental conditions. Last is the genre distinction between narrative and conversational discourse. All four dichotomies have been useful either methodologically or historically. But important as they may have been in the past, the time has come to work toward an integrated approach to the study of human communication, one that will be less dependent on narrow reductions. (Givón, 1997, Preface)

This study follows Givón's suggestion of integrating several different traditions of conversation analysis. The researcher thereby adopts a sociolinguistic approach in which the findings and methodologies of interactional sociolinguistics and interlanguage pragmatics are dominant and the ethnomethodological perspectives and results are respected and taken into account. Nonetheless, this study will not restrict itself to the findings of these disciplines alone, but will draw from the discoveries, ideas, and knowledge regarding self-repair strategies of many other conversation analysts and conversation analytical studies.[1]

1.2. The problem

Even though casual conversations have been studied for several decades, there remains much to be discovered about the way in which we structure, organize, and process these everyday speech events. The author has chosen to analyze German and English conversations of female and male bilingual speakers because it is her working assumption that observations of similarities and differences in speech events occurring in different languages highlight cross-linguistic features and expose those that are specific to a particular language. Cross-linguistic and cross-gender studies with bilingual conversationalists are particularly revealing since they allow us to distinguish between differences related to the gender of the speaker or the addressee, to the particular language in question and to an individual's personality, thus

[1] See also Chapter Two and Three.

presenting a multitude of possible factors guiding the conversational strategies at a certain point in the conversation. The analysis of cross-linguistic conversations of bilingual speakers will isolate universal conversational strategies while at the same time separating them from individual conversational strategies and from those conversational strategies that are linked to a particular language.

Conversation analysts who have investigated bilingual speech have mainly dealt with code-switching. So far, studies of bilingual conversations have concentrated on the alternating use of two languages in the same conversation and have attempted to explain code-switching, interference or transfer by adopting the methods of conversation analysis (e.g., Auer, 1982, 1983, 1984a, 1984b; Romero, 1988; Burt, 1992; Halmari, 1995; Johnson, 1996; Maschler, 1991; Nishimura, 1995; Romaine, 1995). Hence, these are investigations of *bilingualism* which use the methods of conversation analysis or interactional sociolinguistics to learn more about an individual's usage of two or more languages. In fact, bilingual conversation is not mentioned at all in major publications dealing with conversation or discourse (e.g., Grice, 1975, 1978; Edmondson, 1981; Schröder & Steger, 1981; Brown & Yule, 1983; Atkinson & Heritage, 1984; Dorval, 1990; Schiffrin, 1990, 1994; Ervin-Tripp, 1993; Eggins & Slade, 1997; Givón, 1997).

The approach of the present study is different. It will analyze German and English conversations by the same bilingual language users in order to learn more about the structures and patterns of their conversation and language usage in the two

languages. The primary goal of this study is the description of conversational structures and variations in conversational patterns related to the language in use and of possible variations of conversational patterns which may be linked to the speaker's gender. Thus, the data analysis focuses on two major issues, viz., the way in which a particular language (English or German) changes the conversational style of individual speakers, if at all, and the way in which the gender of the interaction partner changes the conversational style of individual speakers, if at all.

These issues will be investigated with reference to a single major discourse notion which allows inferences about conversational structure and style, namely self-initiated same-turn self-repair.

1.2.1 Defining repair and self-initiated same-turn self-repair

Schegloff, Jefferson, and Sacks (1977) distinguish between correction and repair. Correction is defined as one of several possible types of repair. It serves to replace an error or mistake by the correct linguistic form. Repair, on the other hand, is not limited to the replacement of an error, but deals with some kind of 'trouble'[2] in spontaneous speech. Following Schegloff, Jefferson, and Sacks (1977), as well as Fox, Hayashi, and Jasperson (1996), the author defines 'repair' as error correction, the search for a word, hesitation pauses, lexical, quasi-lexical, or non-lexical pause fillers, immediate lexical changes, false starts, and instantaneous repetitions. Repair

[2] The term 'trouble' is chosen with the perspective of the speaker in mind.

consists of three components, namely repaired segment containing the repairable,[3] repair initiation, and repairing segment. The repairable is not necessarily audible to the addressee and researcher, but can be inferred from the presence of repair initiation and the repairing segment. Repair initiation can consist of a cut-off, a filler, or a combination of these, but in the case of repetitions it may be non-detectable as well. The repairing segment repairs the trouble that the speaker perceived, for example by finding or replacing a word.

This study will concentrate on self-initiated same-turn self-repair. Schegloff, Jefferson, and Sacks (1977) were the first to describe the term self-initiated same-turn self-repair and to systematically investigate and describe self-initiated same-turn self-repair in conversations. Self-initiated same-turn self-repairs comprise a particular set of repair strategies in which repairable and repairing segment occur in the same turn and the repair is performed by the initiator of the repairable. Every feature used by a speaker that interrupts or disturbs the smooth flow of his or her speech can be listed under the heading of 'self-initiated same-turn self-repair.' As is the case with repair in general, these features include: error correction, searching for a word, hesitation pauses, lexical or quasi-lexical pause fillers, immediate lexical changes, false starts, and instantaneous repetitions when initiated and produced in the same turn as the repairable and by the same person that uttered the repairable.

[3] A 'repairable' – also called 'trouble-source' is that which is being repaired (cf. Schegloff, Jefferson and Sacks 1977).

1.2.2 Self-repair, language, and conversational style

The organization of self-initiated same-turn self-repair (henceforth self-repair, unless otherwise noted) is part of the organization of language and the interactive use of language. For this reason we need to study the mechanism and rules that govern self-repair if we want to understand the organization of conversations and language itself. Although conversation analysts are aware of this need and have undertaken studies focusing on the organization of repair or self-repair, very little research has been done on self-repair in different languages[4] and none on self-repair strategies of bilinguals. Nevertheless, research of this type will provide further insights into systematicities governing language use, conversation, and bilingualism, and it will help solve the question as to which devices – linguistic, cognitive, social, or individual – play a dominant role in shaping conversational structure.

Self-repair also shapes the conversational style of individual speakers and it is thus a very efficient instrument to monitor changes and variations in conversational style depending on linguistic and non-linguistic factors, such as a particular language or the gender of an addressee.

1.2.3 Research questions and expected findings

It has been noted that the analysis of self-repair strategies is a highly effective instrument to study a speaker's conversational style. Moreover, it is a fine tool to

[4] See Chapter Two, Section 2.4.

investigate cross-linguistic similarities and differences. This study will investigate whether, and how, the use of a particular language (English or German) in an everyday speech event changes the self-repair strategies and thus the conversational style of individual speakers; and whether, and how, the gender of the interaction partner affects the self-repair strategies and thus the conversational style of individual speakers. By comparing the self-repair strategies of the same speakers in German as well as English conversations the researcher will be able to draw inferences about individual self-repair strategies, self-repair strategies in German and English conversations, and she will be able to examine similarities or differences in self-repair strategies related to the gender of the speaker and/or addressee. For instance, self-repair and syntax are said to be interdependent. Fox et al. (1996) have found that American and Japanese conversationalists organize self-repair differently based on the different structures in the syntax of spoken Japanese and spoken English. The differences in syntax between these two languages are more distinct than those between spoken German and spoken English. Nevertheless, we can expect to observe variance in the organization of self-repair in German and English talk. For this reason, my first hypothesis states:

> that a bilingual speakers will organize self-repair in conversations according to the syntactic structure5 of the language in question,

[5] With syntax or syntactic structure the author designates the surface structure of sentences and utterances, i.e., their constituents and phrasal categories as well as their functions on the sentence level (see Burton-Roberts, 1997).

and by doing so she or he will change his or her conversational style.

Researchers have only started to investigate whether women and men use different repair strategies. My second hypothesis is therefore:

that women and men do not use self-repair strategies differently, no matter whether they are talking to same-gender partners or opposite-gender partners, but that individual differences in their use are likely to occur.

Thus my third and last hypothesis is:

that each speaker has individual self-repair strategies that help shape her or his conversational style and that those individual strategies are not affected by a particular language or the gender of an interaction partner.

The results of this study will be helpful in developing communicative strategies for second language learners. Suggestions will be made as to how the findings of this study can be used in a second or foreign language classroom to improve the performance of second/foreign language learners.

1.3 Preview of the following chapters

The following chapter provides an overview of relevant studies in repair and self-repair. Major findings in the area of classic conversation analysis as developed by

ethnomethodologists, who were the first to investigate self-repair in conversations, are presented along with the results of psycholinguistic investigations into self-repair strategies. Differences in terminology and research perspectives are pointed out. Cross-linguistic studies in self-repair are discussed before the key findings of the self-repair strategies of second/foreign language users conclude the literature review.

Chapter Three describes in great detail the methodology employed in the present study, including the instrumental definitions of the terms 'bilingualism,' 'conversational style,' and 'idiosyncratic filler.' It addresses the nature of the data, the profile of the subjects, the manner of data collection and preparation, including transcribing, coding, and mathematical manipulation. Finally, the parameters for quantitative and qualitative analyses are specified before technical terms, such as 'self-repair,' 'hesitations,' 'gaps' and 'fillers,' 'repetitions,' and 'false starts' are described.

In Chapter Four, a quantitative and qualitative analysis of each subject's production of fillers – quasi-lexical and lexical fillers, as well as sound lengthenings – is undertaken and presented. In a final section, the findings for each of the eight participants in this study are compared to each other, and differences depending on the language used or the gender of the interaction partner are determined.

In Chapter Five, the ten most frequent repetitions and false starts are analyzed in a quantitative and qualitative manner for each individual subject prior to the summarizing section which presents a comparison of their results and establishes

trends with regards to differences in self-repair strategies depending on the language or the gender of the addressee.

This study concludes with a summary and an interpretation of its findings in Chapter Six. Here the hypotheses are supported or refuted, and the results are linked to the findings of previous studies in self-repair. The limitations of a study with eight participants are discussed and implications for the second/foreign language classroom are presented before suggestions for future research will be made.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter introduces and discusses studies of relevance to the present research project, thereby providing an overview of the most important findings on conversational self-repair and self-repair in other spontaneous speech events. The emphasis in this review is on the conversation-analytic approach to self-repair which is most closely related to the approach employed in the present study.

The beginnings of ethnomethodological research in the area of error correction, repair and self-repair will be surveyed (Section 2.2.1) prior to a review of conversation-analytic studies dealing exclusively with self-repair (Section 2.2.2). The next section will briefly examine fillers, which are often ignored by conversation analysts (Section 2.2.3). Section 2.3 will report on the most important findings of psycholinguistic studies which also contribute to our understanding of self-repair. Next, the focus will be on cross-linguistic investigations of self-repair (Section 2.4), and finally on second/foreign language speakers' usage of self-repair (Section 2.5).[1]

[1] Computational linguistic studies will be completely disregarded in this overview. Examining the problems that self-repair causes for computer programs designed to process human speech exceeds the scope of the present study.

2.2 Conversation-analytic approaches to repair

Although studies of repair abound in the areas of psycholinguistics (cf. Shriberg, 1994; Van Hest, Poulisse, & Bongaerts, 1997), computational linguistics (cf. Jasperson, 1998), and ethnomethodology (cf. Fox, Hayashi, & Jasperson, 1996), the main focus of this review will be on the latter area. Most relevant for the present study is ethnomethodological research which falls into the paradigm of 'classic' conversation analysis, a distinct type of discourse analysis developed for spoken discourse by Sacks, Schegloff, and Jefferson (Sacks et al., 1974).[2]

2.2.1 Early studies on conversational repair

In conversation analysis, Jefferson (1974) is the first publication focusing on self-repair, although the author does not use the term 'self-repair,' but 'error correction.' She presents several 'formats' of error correction and describes their form and function. A detailed description of her approach is appropriate here because it gives us valuable insight into the beginnings of conversational self-repair research.

The 'Error Correction Format' is the key concept in Jefferson (1974). It is expressed as

[$WORD_1$ + HESITATION + $WORD_2$] (Jefferson, 1974, p. 186)

and indicates "that some object is an error and some other object its correction" (Jefferson, 1974, p. 186). The Error Correction Format consists of three components:

[2] See also Chapter One, page 5.

two distinct lexical items and a hesitation element. It also elicits a temporal sequence that suggests that $WORD_1$ precedes a HESITATION which in turn precedes $WORD_2$.

Jasperson (1998) stresses that Jefferson's format is fairly general.

> It [is] worth injecting that forms such as WORD and HESITATION are relatively general or abstract since a large number of 'things' can count as words or hesitations in English. On the other hand, the purely formal difference referenced by the subscriptions on $WORD_1$ and $WORD_2$ – meaning that the actual lexical element of $WORD_2$ must be different from that of $WORD_1$ - represents a minimal sort of abstractness. And probably somewhere in between these degrees of abstraction is that which is represented by the temporal ordering. Thus, the component forms of the format may vary in abstractness, but they are nonetheless characterizable as within the realm of linguistic form. When we speak of functions accomplished through the structured forms, we pass to a much greater level of abstraction. (Jasperson, 1998, p. 24)

The function that Jefferson posits for the Error Correction Format is that the first lexical item ($WORD_1$) is corrected by the second lexical item ($WORD_2$). Put differently, $WORD_1$ is regarded as incorrect or inappropriate whereas $WORD_2$ is regarded as both correct and appropriate. In example (1)[3] taken from Jefferson's paper, *lay* exemplifies $WORD_1$ and *earlier* exemplifies $WORD_2$, which corrects *lay*. The HESITATION component in this example is a cut-off represented by a dash and the quasi-lexical filler *uh*.

(1) Desk: He was here lay- uh earlier, but 'e left.

(Jefferson, 1974, p. 185)

[3] Examples taken from other studies follow their transcription conventions.

In the formula presented by Jefferson the "object" represented by $WORD_1$ may occur at different stages of verbalization. It may be partially verbalized, as in example (1), in which *lay* is a partial verbalization of 'later,' or completely verbalized as in the following example (2).

(2) Wiggens: I wz- made my left, uh my right signal . . .

(Jefferson, 1974, p. 185)

Example (2) contains two error corrections according to Jefferson's Error Correction Format. In the first, $WORD_1$ is exemplified by *wz*, and *made* exemplifies $WORD_2$. The HESITATION component is represented by a cut-off. In the second error correction, $WORD_1$ is given by *left*, $WORD_2$ is illustrated by *right* and the HESITATION component is represented by the quasi-lexical filler *uh*. In both instances the word to be replaced, ($WORD_1$), is fully verbalized.

$WORD_1$ may also be an omitted component in Jefferson's formula. In that case, $WORD_1$ is not verbalized at all, but projected. An example is given in (3). Here $WORD_1$ is missing. Jefferson argues that the pronunciation of the definite article as *thuh* (as in 'run') instead of *thee* (as in 'see') indicates that the projected word was to start with a consonant and not with the vowel 'o' of the word *officer*.[4] Jefferson believes that Parnelli, who made this statement in traffic court, had projected the word 'cop,' but had found the word inappropriate for the courtroom situation,

[4] According to the researcher's observation, it has to be noted that many native speakers of American English and also a considerable number of non-native speakers of English do not use *thee* before vowel-initial nouns. This remark, however, is not made to argue against Jefferson's case.

therefore changing the projected 'cop' (projected $WORD_1$) into *officer* ($WORD_2$). The cut-off of the article and the usage of the quasi-lexical filler *uh* represent the HESITATION component in this example and are – in the absence of $WORD_1$ – a reliable indicator for the presence of an Error Correction Format.

(3) Parnelli: I told that to thuh- uh- officer.

(Jefferson, 1974, p. 189)

Analogously to the fact that the "object" represented by $WORD_1$ may represent diverse items in Jefferson's formula, HESITATION may represent several different items as well. It may consist (a) of a cut-off, transcribed by a dash and identified by a glottal stop. In the first Error Correction Format of example (2) the HESITATION component consists of a cut-off. This component may also consist (b) of a quasi-lexical filler. In the second Error Correction Format of example (2) the HESITATION component is a quasi-lexical filler. Finally, the HESITATION component may consist (c) of a cut-off and a subsequent quasi-lexical filler, as illustrated in example (1) (see page 20).

It should be noted that the formula for the Error Correction Format does not contain representations of every lexical and quasi-lexical item that may be articulated as part of the Error Correction Format. One or several other lexical items may be articulated between the utterance of the incorrect or inappropriate word ($WORD_1$) and the occurrence of the HESITATION component. In example (4) *like* is replaced

by *hate*. Before a cut-off (HESITATION) occurs, the lexical item *to* is uttered, which is not represented in the formula.

(4) 'I really like to- hate to get up in the morning'

(Jefferson, 1974, p. 187, fn. 12)

Another format, distinct from the Error Correction Format described by Jefferson without giving it a name, is:

[cut-off + pause] (Jefferson, 1974, p. 187).

Jefferson distinguishes between this format and a special case of the Error Correction Format, namely:

[cut-off + correction] (Jefferson, 1974, p. 187).

A noticeable silent pause that follows the cut-off replaces the correction or $WORD_2$ in Jefferson's first formula. In this second formula, no correction takes place, and the question arises whether an error has occurred or not. The researcher argues that the two forms might appear to be different, but shows that they are treated in a similar way by the addressee who interprets the cut-off as a cue that an error has occurred or that a projected word is being reassessed. The replacement of a partially verbalized or projected $WORD_1$ is not considered mandatory. The addressee will propose $WORD_2$ if a pause occurs after cut-off and no replacement is made, as is the case in the following two examples, (5) and (6), provided by Jefferson (1974, p.186).

(5) Ken: I like driving. I really do. I enjoy it very much.

Louise: I used to like it until I became the complete sl- uhm,

(1.0)

Ken: 'Slave'? Yeah.

(6) Louise: My father's six foot two feet he's large an' [he's a very s-

Ken: [ehheh

(1.0)

Ken: 'St (hh) able per[son' yea (h) h.

Louise: [Sta- mm hm,

(1.0)

Louise: Stable or not, he's uh (1.0) aggressive kind of person

In both examples a partial verbalization takes place followed by a cut-off and a pause. In example (5) the partial verbalization consists of *sl*. The addressee does not interpret the beginning of the word as an incorrect word because he takes it up and completes it. However, he does recognize the cut-off as a part of the Error Correction Format, otherwise he would not interfere and try to complete the speaker's utterance by proposing the word 'slave.' The same holds for example (6), in which an even less complete lexical item *s* is completed and transformed into 'stable' by the addressee. By contrast, in example (6), the speaker's reaction is given, and it seems that the speaker has rejected the partially verbalized item (that may or may not have been 'stable') and has replaced it with 'aggressive.' In this instance *s-* would thus have

been viewed as an incorrect word and the pause as an indication of the speaker's search for a more appropriate word.

Jefferson argues that even though an addressee interprets a partially verbalized word as correct, she or he does recognize it as part of the Error Correction Format. For her, the Error Correction Format is not an instrument for researchers to describe conversationalists' behavior, but is a device used and recognized by speakers and addressees:

> [...] the cut-off marker or pre-correction hesitation is an operating component of the Error Correction Format itself, independent of possible involvement in some word search. It is part of the recognizable presentation of 'an error and its correction'. Were it not for that marker separating an error and a correction, a hearer might treat the utterance as correct in the first place and look for its sense as it stands. (Jefferson, 1974, p. 187)
>
> These are some of the workings which indicate that error correction is a systematic feature of speech, and further, that it is achieved by the application of a specific device, the Error Correction Format, to the production and hearing of ongoing talk. (Jefferson, 1974, p. 188)

Jefferson's detailed description of the Error Correction Format is a precise, but slightly incomplete description of what became later known as a 'false start' and a 'restart.'

Schegloff, Jefferson and Sacks (1977) introduced the term 'repair' for 'error correction' or 'correction' because the latter suggests that an 'error,' a 'mistake,' or 'fault' has occurred prior to the correction by a replacement. However, the phenomena that they are investigating are "neither contingent upon error, nor limited

to replacement" (Schegloff et al., 1977, p. 363). Examples are given to illustrate what other features of talk-in-interaction are included in the phenomena designated as 'repair.' The first feature examined, which contains neither a replacement nor an error, is a 'word search' as portrayed in example (7). The speaker, Clacia, is obviously searching for the name of a girl with whom she went to school. A first indication for the word search is given when she lengthens the lexical item *named*, then uses a quasi-lexical filler followed by a silent pause, and finally verbalizes her problem: *W't th' hell wz er name.*

(7) Clacia: B't, a-another one theh wentuh school with me
wa:s a girl na:med uh, (0.7) W't th' hell wz
er name. Karen. Right. Karen.

(Schegloff et al., 1977, p. 363)

In example (8) the authors show that repair/correction[5] can occur without a prior occurrence of a "hearable" error or mistake. The term *bell* that is being replaced with *doorbell* was not incorrect or inappropriate, but was replaced nonetheless.

(8) Ken: Sure enough ten minutes later the bell r-
the doorbell rang ...

(Schegloff et al., 1977, p. 363)

[5] Although Schegloff et al. (1977) intended to replace 'error correction' by the term 'repair' and explained why this distinction is necessary, they continued using both terms interchangeably in this particular publication.

A further example (9) is meant to demonstrate that hearable errors may also occur without soliciting repair/correction. Referring to two fragrances, the Avon Lady uses *is* instead of *are*, which is grammatically incorrect, but neither she nor the customer corrects or repairs it.

(9) Avon Lady: And for ninety-nine cents uh especially in, Rapture, and the Au Coeur which is the newest fragrances, uh that is a very good value.

Customer: Uh huh,

(Schegloff et al., 1977, p. 363)

With these examples Schegloff et al. explain the need to use the new term *repair* instead of (*error*) *correction*:

> Accordingly, we will refer to 'repair' rather than 'correction' in order to capture the more general domain of occurrences. (Schegloff et al., 1977, p. 363)

Moreover, they stress that since repair can occur with no audible error, nothing can *a priori* be excluded from the class 'repairable' or 'trouble source':

> In view of the point about repair being initiated with no apparent error, it appears that nothing is, in principle, excludable from the class 'repairable.' (Schegloff et al., 1977, p. 363)

Schegloff et al. (1977) distinguish between self-correction/self-repair and other-correction/other-repair, stressing that it is an important distinction, given that repair is a feature of social organization. Moreover, the dichotomy 'self/other' has always been of particular interest to American and European sociology because it

plays a central role in social organization and social interaction. Schegloff et al. also emphasize that self-repair and other-repair are related features of talk-in-interaction:

> [...] self-correction and other-correction are not to be treated as independent types of possibilities or events, nor as structurally equivalent, equipotential, or equally 'valued'. Rather (and this is a central theme of our paper) self-correction and other-correction are related organizationally, with self-correction preferred to other-correction. (Schegloff et al., 1977, p. 362)

A second distinction is made between the initiation and the outcome of repair. If repair does not succeed, its outcome is failure, and 'failure' is the term that Schegloff et al. (1977) use in these cases instead of 'repair.' Regardless of whether repair succeeds or fails, and regardless of whether it is self-repair or other-repair, repair may be initiated by the same person who uttered the repairable; it is then called 'self-initiated repair' or 'self-initiation.' Repair may also be initiated by the addressee. In that case it is termed 'other-initiated repair' or 'other-initiation.' Six potential scenarios follow from these statements.

Self-repair may result from self-initiation. In example (10) the speaker N initiates and completes the replacement of *year* by *quarter*.

(10) N: She was givin me a:ll the people that
were go:ne this yea:r I mean this
quarter y'// know
J: Yeah

(Schegloff et al., 1977, p. 364)

Self-repair may result from other-initiation. In example (11) the repairable or trouble source is the *yeah* uttered by Dan in response to Ken's question whether Al was there. That response needs some clarification for Roger, who initiates a repair through another question, and Dan completes the repair by modifying his initial response. Repairable and repair are thus performed by the same person (Dan), but the initiation is made by another person (Roger).

(11) Ken: Is Al here today?

Dan: Yeah.

(2.0)

Roger: He is? Hh eh heh

Dan: Well he was.

(Schegloff et al., 1977, p. 364)

Other-repair may result from self-initiation. In example (12) speaker B is searching for a word; B initiates the repair and A helps him out by naming the word that B was looking for. Thus A completes the repair initiated by B.

(12) B: He had dis uh Mistuh W- whatever k- I can't think of his first name, Watts on, the one thet wrote // that piece,

A: Dan Watts

(Schegloff et al., 1977, p. 364)

Other-repair may result from other-initiation. In example (13) speaker B replaces A's phrase *playing around* with *fooling around*, and A accepts the repair. The repairable was thus uttered by another person (A) than the one (B) who initiated and completed the repair.

(13) B: Where didju play ba:sk//etbaw.

A: (The) gy:m.

B: In the gy:m?

A: Yea:h. Like grou(h)p therapy. Yuh know=

B: [Oh:::.

A: [half the group thet we had la:s' term wz there en we jus' playing aroun:nd.

B: Uh- fooling around.

A: Eh- yeah ...

(Schegloff et al., 1977, p. 365)

Failure may result from self-initiation. In example (14) Mike is obviously searching for a word; thus he initiates a repair, but he cannot find the word, and Vic does not help him out. Consequently, the repair fails and the conversation continues without Mike being able to make his point.

(14) Mike: I never heard it eetheh.

(0.7)

Mike: Awl I her- All I- Awl I ree- all you- all //

I ree-

Vic: You knew duh broa//:d.

(Schegloff et al., 1977, p. 365)

Failure may result from other-initiation. In example (15) Dan seems not to agree with Roger's statement, and therefore Roger encourages him to talk about his perspective. Roger initiates a repair for Dan. Dan, however, does not take it up, and so the repair fails.

(15) Roger: It's kinduva- // kinduv weird.

Dan: heh

(2.0)

Roger: Whadda you think.

(2.0)

Ken: Hm?

Roger: Ferget it.

(Schegloff et al., 1977, p. 365)

Schegloff et al.'s (1977) next focus of attention is the distinction between self-initiated and other-initiated repair, concentrating on the positions in which they occur. Self-initiation of repairs may occur in three different positions: (1) It may occur in the

same turn as the repairable; (2) it may occur in the transition space[6] of the turn in which the repairable occurs; (3) it may occur in the so-called third turn (cf. Schegloff 1997), that is, the turn in which the speaker who previously uttered the repairable takes the floor again. The third turn is usually the second turn after the one in which the repairable occurred. Other-initiation of repairs, on the other hand, may occupy only one position, namely, the next turn. It is located in the turn following the turn containing the repairable. Jasperson (1998) illustrates the organization of initiation and repair according to Schegloff et al. (1977) in Figure 2-1.

Turn	Position	Initiation	Repair
Same	[1st] [2nd]	self	self
Next	[3rd]	other	self/(other)
Third	[4th]	self	self

Figure 2-1. Repair initiation positions. (Jasperson, 1998, p. 21)

According to Jasperson, self-initiated repair is always self-repair, whereas other-initiated repair might be self-repair or other-repair. However, Schegloff et al. (1977) have shown that only same-turn self-initiated repair is always self-repair,

[6] "Cf. Sacks et al. (1974: 702-6). The transition space, roughly, is the environment of a turn's possible completion, at which possible transition to the next speaker becomes relevant. [...] the transition space may begin a bit before the possible completion point, and last a bit into the beginning of a next turn." (Schegloff et al., 1977, p. 366, fn. 12)

whereas third-turn self-repair can also be other-initiated. Hence, Jasperson's figure requires a small correction: Third-turn repair can be self- or other-initiated and is self-repair.

The progression from self-initiation to repair is regular and different from the sequence of other-initiation to repair. While the first is usually successful within the same turn, the latter needs several turns for successful completion. Self-initiated repair is thus positioned before other-initiated repair. Moreover, other-initiation is typically delayed somewhat past the possible completion of the turn in order to give the speaker the opportunity for self-initiation. Sometimes this leads to self-initiation, and the authors take the presence of a pause as proof for a withheld other-initiation (p. 374). Schegloff et al. (1977) speak about a 'repair-initiation opportunity space' covering three turns.

> The space is three turns long, starting from (i.e., including) the trouble-source turn. Nearly all repairables on which repair is initiated have the repair initiated from within this space. (Schegloff et al., 1977, p. 375)

In the majority of the cases in which repair occurs, this space is used by the speaker to initiate the repair. Hence, a preference for self-initiation is observed, which is distinct from a preference for self-repair. However, a preference for self-initiation also accounts for a higher frequency of self-repair. Furthermore, other-initiated repairs usually yield self-repair. Consequently, self-repair occurs more often than other-repair.

Self-repair that is self-initiated in the first two positions either combines the location of the repairable with the repairing segment or results in repair without locating the repairable.[7] On the other hand, other-initiation does not provide for positioning the repairable and the repairing segment in the same turn but simply locates the repairable. The techniques involving other-initiation are thus distinct from those for self-initiation. They are techniques for locating or pointing out the repairable. Therefore self-repair and other-repair cannot be viewed as alternatives. It has been shown that the conversational organization of repair provides mainly for self-repair, which may be achieved in two ways, self-initiation or other-initiation, which are again organized in favor of self-initiated self-repair.

Schegloff et al.'s (1977) main finding is that conversational repair is an orderly feature of talk-in-interaction, i.e., "it is dealt with in an organized fashion" (Schegloff, 1979, p. 261, fn. 1), and this means that a set of rules can be delimited that describes all possible occurrences of repair in terms of location, form, and function. The most important rules formulated by Schegloff et al. are:

1. Nothing may *a priori* be excluded from the class of repairable;
2. there is a preference for self-initiation of repair; and
3. there also is a preference for self-repair.

A fundamental difference between Jefferson's (1974) paper and Schegloff et al.'s (1977) paper lies in the fact that the latter seeks to describe the mechanisms and

[7] The latter is the case for repetitions and fillers.

rules of the organization of language and language usage in terms that are not only useful for, but have been primarily developed for theoreticians in linguistics and sociology. Jefferson (1974), on the other hand, is mainly concerned with formats that are applied and understood by the conversationalists themselves.

2.2.2 Studies on conversational same-turn self-repair

Among self-initiated self-repairs, same-turn self-repair is preferred (Schegloff, 1979). It is *this*, the most common and frequent self-repair type, on which this thesis will focus. The remainder of the review of literature related to the present study will therefore concentrate exclusively on self-initiated same-turn self-repair, or, simply, self-repair. In order to avoid repetition of the rather long and clumsy term 'self-initiated same-turn self-repair' the term 'self-repair' will henceforth be used instead unless otherwise noted.

Conversation-analytic studies including Jefferson (1974) and Schegloff et al. (1977) have described numerous formal and functional characteristics of self-repair. While Jefferson's findings have already been discussed in detail, some properties of self-repair as clarified by Schegloff et al. (1977) still need to be addressed, such as the basic format of self-repair.

They describe it as initiation with a non-lexical initiator that is followed by the repairing segment (p. 376). These non-lexical initiators are comprised of cut-off, lengthening of sounds, and quasi-lexical fillers. The functions of self-repair are:

1. word search;
2. word replacement;
3. repair on person references; and
4. repair of next-speaker selections (pp. 363 and 370-2).

Most of these functions involve the replacement of one lexical item by another (or in cases of repetitions, by the same) lexical item, but the authors further subdivide these functions. They use separate categories for repair of person references and repair of next-speaker selections. The same category 'word replacement' thus does not contain words referring to persons. Word search is another type of self-repair that may, if masked by repetitions, include the replacement of one word by the same word. A word search enables the speaker to gain time, which she or he achieves through the explicit and overt search for the lexical item in question, or through the usage of fillers or repetitions.

Schegloff (1979) concentrates mainly on the format of repair-initiation through cut-off, filler and pause.

> One very common form is the CUT-OFF (typically a glottal or other stop), which is used for within-word (or within-sound, for *uh* also gets cut off) initiation. When repair is initiated outside the boundary of a word or other sound, *uh* or a pause are commonly used as initiators (they are also used AFTER the initiation of repair as components of a repair segment, and often in combination – *uh* + pause). The cut-off stops a "next sound due" from occurring when it is due; the *uh* and pause occupy the position at which a next element of talk would otherwise be placed. (Schegloff, 1979, pp. 272-3)

Schegloff (1979) usually calls the cut-off 'postpositioned' and 'retrospective,' and the quasi-lexical filler and pause 'prepositioned' and 'prospective.' The former is called 'postpositioned' and 'retrospective' because (and if) it operates on an item that has already been produced or partially produced. The latter is called 'prepositioned' and 'prospective' because (and if) it initiates repair of an element that needs as yet to be verbalized.

Like self-repair, repair-initiation can occur anywhere in the turn; however, there are locations in which a concentration of repair-initiations, and thus repairs, are observed. These locations are at the beginning and at the (projected) end of various unit types, such as words, clauses, sentences, and turns (p. 275). In the case of 'focused repair' (which operates on "a particular word or phrase in the turn-so-far" [p. 272]) the initiation does not occur later than two words after the repairable.

Finally, with respect to the function of repair, Schegloff (1979) examines repair operations and their impact on the organization of the syntactic structure of turns:

1. Self-repair may bring about a replacement of one word by a word of the same class or
2. it can bring about a syntactic reconstruction of the turn-so-far.
3. Self-repair can influence the structure of the turn by inserting a modifier before an item and
4. it can frame a clause through insertion of adverbs or clauses.

5. It is distinguished between abandoning a turn-so-far to begin a (semantically and pragmatically) different turn-constructional unit[8] and
6. to reconstruct it in a different way that is not semantically and pragmatically different.
7. Repetitions as self-repair may 'mark time' before they blend into an overt word search introduced by a quasi-lexical filler.

Goodwin (1981) is also concerned with the function of self-repair. Like Jefferson (1974), he describes repair formats. The following two are contrastive in nature.

Pause: [Beginning] + [Pause] + [Continuation]

Restart: [Fragment] + [New Beginning]

(Goodwin, 1981, p. 96)

Both formats regularly employ cut-off, and they are both used to request gaze from the addressee. A pause requests gaze at the beginning of a turn when the speaker has not yet looked at the addressee. A restart is used somewhere in the turn when the speaker is looking at the addressee and notices that the addressee is not looking at the speaker, which represents a violation of gaze organization. Goodwin's work has been important for researchers who develop repair typologies based on form and function of the repair, as, for example, Jasperson:

[8] Sacks et al. (1974) have introduced the term 'turn-constructional unit'. This unit of speech may be a word, phrase, clause or sentence. The unit is determined from a syntactic, semantic, pragmatic and/or intonational point of view.

> Goodwin's work is relevant for the present study's interest in specifying contrastive form-function pairings. The two formats [...] are formally distinct, e.g., continuation versus new beginning, and they function in correspondingly different ways. (Jasperson, 1998, p. 30)

Fox and Jasperson (1995) have developed a typology of self-repair that will be presented in detail because it is the most complete typology to date. However, they have not taken into account fillers, repair initiator type, or prosodic elements. It is important to clarify Fox and Jasperson's (1995) terminology before presenting their typology because it differs from the terminology of the studies discussed so far. According to Fox and Jasperson, self-repair may consist of three parts. However, sequentially the third part precedes the first and second one. The first is the 'repair initiation,' a component that includes or consists of cut-off, pause or filler. The 'repairing segment' is the second part; it consists of what Schegloff et al. (1977) called 'repair segment' or simply 'repair.' The third part is referred to as 'repaired segment,' and it consists of that portion of talk which contains the repairable. According to Fox and Jasperson (1995), and Jasperson (1998), a word search does not have this third part.

Fox and Jasperson (1995) classify self-repair into seven different types. Example (16) illustrates Type A which consists of the repetition of a lexical item, here the word *school*. The repairing segment and repaired segment are identical. Example (17) illustrates the same type. Here it is the pronoun *she* that is repeated. The two instances of Type A differ; in the first one it is obvious that a word search is masked by a repetition, which is evident from the combination of several time-gaining

strategies, namely repetition, filler, and pause. In example (17) this is not the case. Therefore, the typology does not distinguish by the motivation for repetition.

(16) B: I don't know. The school- school uh, (1.0) bookstore doesn't carry anything anymo (h) re,

(Fox & Jasperson, 1995, p. 91)

(17) B: And she, she had gai:ned about 40 pounds anyway.

(Fox & Jasperson, 1995, p. 92)

Type B involves the replacement of a cut-off word. The word that is being replaced is the one that contains the repair initiation. Repairing segment and repaired segment are different. In example (18) *fron-* is being replaced by *back*.

(18) D: They get- their g- teeth keep grow:ing rou:nd. From the fron- back to the front.

(Fox & Jasperson, 1995, p. 102)

Type C consists of the repetition of several lexical items. Here the repairing segment and repaired segment are identical. In example (19) *are very* is repeated.

(19) A: And generally the short versions I think are very (0.2) are very reasonable.

(Fox & Jasperson, 1995, p. 103)

Type D consists of a repetition and the replacement of one lexical item. Part of the repaired segment is repeated in the repairing segment, and another part is

replaced. In example (20), *I have* is repeated followed by the replacement of *the* by *one*. In example (21) *at* is repeated and the following *my* is replaced with *this*.

(20) A: Oh I have the- I have one class in the evening.

(Fox & Jasperson, 1995, p. 101)

(21) K: Now I'm going to look (0.5) at my (1.1) at this.

(Fox & Jasperson, 1995, p. 102)

Type E consists of the repetition of a clause or phrase and the addition of new elements before the repetition. The added lexical items modify the clause or phrase or add background information. In example (22) *a da-* is modified through repetition with the addition of *blind*, making 'a blind date' out of the 'date.' In example (23) *but I* is recycled after background information has been given.

(22) H: .hh And tshe- this girl's fixed up on a da- a blind date.

(Fox & Jasperson, 1995, p. 103)

(23) K: I dunno where she is but I (0.9) talks about her

every so often but I dunno where she is

(Fox & Jasperson, 1995, p. 94)

Type F is a variation of type E; it also consists of a repetition plus the addition of new elements. These new elements are said to be 'a matrix construction' that frames the repetition. In example (24) *that ma-* is modified to *that should make* and in example (25) *ins-* is replaced by *what they call insert*.

(24) K: Well that ma- that should make this a lot easier,

shouldn't it?

(Fox & Jasperson, 1995, p. 96)

(25) G: Now this terminal (1.2) is smart enough to show you (0.4) that you're in (1.6) ins- what they call insert mode or append mode.

(Fox & Jasperson, 1995, p. 91)

Type G consists of abandoning the portion of talk that is being cut off and a restart. The restart may or may not be semantically and pragmatically linked to the abandoned repaired segment. Example (26) displays how *and we k-* is abandoned for *and there was a little opening*. It is very likely that B was about to say, "and we came to a little opening." In that case, repairing segment and repaired segment are semantically and pragmatically related. In example (27) *it's* is abandoned for *what they want* ... Here it is possible that M was about to say, "it's the force they want." If this is the case, the repairing segment and repaired segment are again semantically and pragmatically related.

(26) B: And we k- and there was a little o:pening.

(Fox & Jasperson, 1995, p. 96)

(27) M: It's uhm (1.3) What they want is the force. Right?.

(Fox & Jasperson, 1995, p. 99)

Fox and Jasperson's typology posits several different repair operations, namely repeating or recycling, replacing or substituting, adding or inserting, and finally

abandoning and restarting; what it does not consider are fillers and word searches. A repair operation can describe more than one type depending on the component that it affects – words, phrases and clauses. Type A and C, for instance, both have the function to repeat, but while Type A describes the repetition of a single word, Type C describes the recycling of more than one word. Types B, D, E, F and G are false starts followed by restarts or fresh starts. Sometimes the restart replaces the false starts, as in Type B, or it replaces a part of the false start, as in Type D, or it adds one or several new elements to the false start, as in Type E, or it adds a framing matrix construction, as in Type F, or the false start is replaced by a fresh start, as in Type G.

While this typology is more comprehensive than Schegloff et al's. (1977) description of the basic format and the four functions of self-repair, not every study takes these types into account for its analysis. The present study will distinguish between fillers, repetitions, altered repetitions, and false starts, concentrating on the repairable or repaired segment and leaving the repairing segment (restart or fresh start) for future research. For repetitions, altered repetitions, and false starts it distinguishes between the linguistic functions that the repeated or cut-off words fulfill in the utterance under investigation, i.e., whether they are prepositions, articles, pronouns, nouns, verbs, etc., or combinations of those.

2.2.3 Fillers – a special case?

In all the above-mentioned studies fillers do not receive much attention. In fact, conversation analysts have not investigated the role of fillers, although they do recognize that fillers are self-repair strategies. Mostly, they are recognized as repair initiators or indicators. Schegloff et al. (1977) write:

> Self-initiations within the same turn (which contains the trouble source) use a variety of non-lexical speech perturbations, e.g., cut-offs, sound stretches, uh's etc., to signal the possibility of repair-initiation immediately following. (Schegloff et al., 1977, p. 367)

If fillers – *uh's* and lengthening of sounds – do not necessarily, but only possibly signal repair-initiation, what *do* they indicate in the absence of a following *recognizable* repairing segment? In that case, fillers are not only *possible* announcers of repair initiation, but *clear* indicators of a self-repair that lacks a hearable repairable, indicators for a word search, or another move in cognitive planning. The word(s) following a filler must be understood as the repairing segment because they constitute the found word(s) or construction. These newly found word(s) or constructions 'repair' the search. Fillers are thus always part of self-repair strategies, and as such they deserve more attention from conversation analysts who seem to consider them a special case requiring no further analysis.

Fox, Hayashi and Jasperson (1996) do recognize that fillers belong to the same category as other self-repairs, but do not analyze them.

> Also included in the formal notion of repair are cases involving utterances which contain occurrences of syllables such as um or uh [...], but in which the syntax continues as projected. [...]

> While these classes of utterances are considered repair, they played no significant role in the present analysis. (Fox et al., 1996, p. 190)

They also play no role in Fox and Jasperson's (1995) typology of self-repair in which word searches and fillers are completely ignored.

However, not only conversation analysts, but also psycholinguists who work in the field of self-repair, do not always recognize fillers as part of the self-repair 'family.' Bear, Dowding, Shriberg and Price (1993), who have developed a labeling system for all types of self-repair, do not in all instances label quasi-lexical (or lexical) fillers:

> We differ from some researchers (e.g., Levelt, 1989; Blackmer & Mitton, 1991) in that we do not label any cases as repairs if simply a filled pause (typically 'uh' or 'um') is present. We do, however, label filled pauses that occur within a longer repair. (Bear et al., 1993, p. 6)

Lexical fillers are even more often ignored by researchers in the study of self-repair. Most of the time they are not mentioned at all, let alone analyzed. Lickley (1994) believes that their inclusion in the category of self-repair, which he calls disfluencies, is controversial.

> The inclusion of lexical fillers in a count of disfluencies is very debatable, since they do not themselves form disfluencies in the same way as pauses and repairs, but appear in specific contexts, usually not at repair sites. (Lickley, 1994, p. 54)

The inclusion of lexical fillers (and quasi- or non-lexical fillers, for that matter) is only questionable if we consider the form of self-repair[9] alone; however, when concentrating on the function of self-repair – dealing with some kind of trouble in spontaneous speech – then fillers are clearly a part of this category. They mostly function to gain time and not lose the floor while searching for a word, structure or organizing the remainder of the turn.

Lexical fillers are special in the sense that they often fulfill more than one function at the same time. In addition to 'playing for time' they can fulfill social, interactional, discourse, and symbolic functions.[10] Therefore, lexical fillers are often analyzed under the heading of discourse markers, in which their role as fillers is sometimes not recognized or barely mentioned. As a case in point, even Schiffrin (1987) devotes only a few paragraphs in a 350-page book on discourse markers to their role as fillers or 'place-holders' (Schiffrin, 1987, p. 76).

When fillers are analyzed, either by conversation analysts, sociolinguists or psycholinguists, they are often placed under a different heading, namely 'hesitation phenomena' or 'filled pauses' (e.g., Rose, 1998). Some researchers do not acknowledge that they are part of the larger category of 'self-repair' (e.g., Maclay & Osgood, 1959; Goldman-Eisler, 1961, 1968, 1972).

---

[9] It has to be noted, though, that some researchers are convinced that fillers have the same form as other self-repairs. Shriberg (1994) shows that fillers have the same surface structure as other self-repairs. See Section 2.3 in this chapter. The present study does agree with her point of view.

[10] See Chapter Four of the present study and Schiffrin (1987).

Goldman-Eisler (1961, 1968, 1972), who was the first to analyze speech rate and pauses, is often credited with the establishment of research in the area of fillers; however, there is an earlier study that dealt with topics as closely related to fillers and self-repair as her research is. Maclay and Osgood (1959) examined hesitation phenomena and found that function words are more often repeated than content words, while content words are more often replaced than function words. Blankenship and Kay (1964), as well as Boomer (1965), also investigated hesitation phenomena, specifically their distribution and grammatical encoding.[11]

Recently, very few studies have examined fillers at all. Brennan and Williams (1995) investigated the mitigative use of fillers. Their findings are supported by Rose (1998), who explores the communicative value of fillers, which he calls 'filled pauses' (FPs). He finds that fillers

> appeared to be used most often as stalling and filling acts during which the subjects prepared their following utterance, whether it was merely the next word, the following tone unit, or an entire span of discourse. [...]
>
> Evidence from the corpus also supports the hypothesis that FPs are used by speakers to mitigate undesirable effects of the message, in particular when one is being assertive. (Rose, 1998, p. 43)

The present study does not consider fillers as a special case that has to be examined apart from other self-repair strategies, but recognizes them as self-repair strategies meriting detailed analysis. Since fillers are among the most frequent self-

[11] Research on filled and unfilled pauses in relation to stress and anxiety factors and research in pathologic disfluency was very prominent in the late sixties and the seventies. These studies are presented succinctly in Rose (1998) and need not be reviewed here.

repair strategies employed, their analysis will be used to test the research hypotheses under investigation.

2.3 Psycholinguistic approaches to self-repair

Psycholinguistic research on self-repair is rarely based on the analysis of self-repairs occurring in conversational speech, but rather on the analysis of self-repairs obtained in an experimental setting. The experiment – often a pattern description task to be completed in a short period of time – is designed to elicit numerous hesitations, speech errors, and their corrections. Although these speech errors and their corrections are comparable to speech errors and other phenomena that require or provoke self-repair and their repair in spontaneous speech, they cannot be regarded as identical phenomena. In particular, the self-repair *strategies* employed in a stressful experimental task may differ from those employed in a casual conversation. In fact, Van Hest et al. (1997, p. 89) call conversational self-repair data "much more authentic but also more complex." For this reason, only a brief overview of the main findings in psycholinguistic research on self-repair will be presented in this thesis about conversational self-repair strategies.

Speech 'errors' and their correction are also called '(self-)repairs' or 'disfluencies' in the field of psycholinguistics. The same phenomena are meant by these terms, which sometimes include fillers, sometimes exclude them or exclude lexical fillers or only quasi-lexical ones. A distinction is made between covert repairs

and overt repairs (Tischer, 1997; Van Hest et al., 1997). Covert repairs are self-repairs in which the repairable is produced in inner speech and thus is not hearable. These repairs are realized by hesitations and repetitions. Overt repairs, which are hearable, are formed after the repairable has been articulated. They are made up of retracings, instant repairs, fresh starts and pivot constructions. Retracings are restarts after false starts in which part of the repairable is being repeated and another part is replaced or a word is inserted. Retracings correspond to Types D and E of Fox and Jasperson's typology. Example (28) taken from Tischer (1997) illustrates a case of retracing.[12] *Sie* (she) is replaced by *wir* (we), while *daß* (that) is repeated.

(28) Daß sie/- daß wir uns da irgendwie groß gestritten haben

That she/- that we somehow had a major fight there

(Tischer, 1997, p. 320)

Instant repairs belong to Type B of Fox and Jasperson's typology. They are repairs after a cut-off that are not followed by fillers and consist of a new start with no recycled elements. In example (29) *hab* (have) is replaced by *war* (was) without repeating *ich* (I).

(29) Ich hab/- war schon an der Uni

I have/- was already at university

(Tischer, 1997, p. 319)

[12] This and other examples taken from Tischer (1997) have been translated by the author of the present study In some cases the translation is deliberately grammatically incorrect in order to reflect the relationship between repairable and repair in the German original.

Fresh starts correspond to Type G of Fox and Jasperson's typology. They consist of a restart that is at least syntactically, but not necessarily semantically and pragmatically distinct from the repairable. Example (30) illustrates a fresh start (*Chemie hätt ich studieren können*, I could have studied chemistry) that is most likely semantically related to the false start (*also ich hab/-*, well I have).

(30) Also ich hab/- Chemie hätt ich studieren können

Well I have/- I could have studied chemistry

(Tischer, 1997, p. 319)

Pivot constructions are self-repairs that contain no cut-off and often no recognizable interruption of any kind. Here a lexical item or several lexical items are re-used after the articulation of a word that acts like a pivot-element. Pivot constructions allow a speaker to use two competing syntactic constructions simultaneously.[13] In example (31) the pivot item is *sind* (are) and the syntactic structure of a statement (*das sind*, these are) and of a question (*sind das*, are these) are realized in one clause.

(31) Wieso das sind das Fragen?

Why these are these questions?

(Tischer, 1997, p. 321)

With the exception of pivot constructions, which occur very rarely (Tischer, 1995, p. 321), all other overt self-repairs fall under the category of 'false start' plus

[13] Pivot constructions are not accounted for in Fox and Jasperson's typology.

'restart' or 'fresh start.' This finding is well-represented in Figure 2-2, which shows Levelt's (1983) description of the structure of an overt self-repair. It is noteworthy that a pivot construction could not be presented in the same manner.

Figure 2-2 also shows that the terminology used in psycholinguistics is different from the terminology used by conversation analysts. The 'original utterance' corresponds to the 'repaired segment,' 'the editing phase' corresponds to the 'repair initiation,' and the 'repair' corresponds to the 'repairing segment.' The 'repairable' is here called 'reparandum,' the 'editing term' is one element of the 'initiation,' and the 'reparatum' corresponds to the 'replacement.' Moreover, the editing phase is introduced by the cut-off, whereas for conversation analysts the cut-off is part of the editing phase called 'self-repair initiation.'

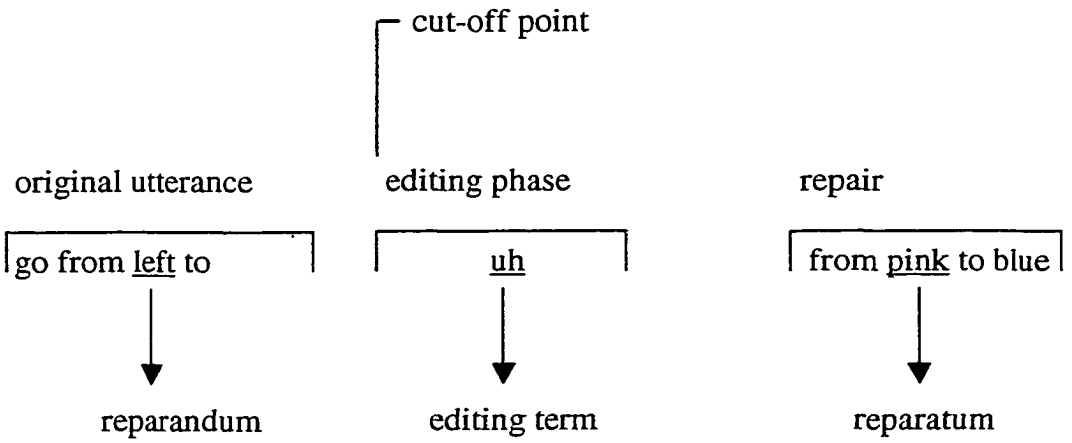

Figure 2-2: Structure of an overt repair. (Levelt, 1983, cited in Van Hest et al., 1997, p. 88)

Unfortunately, differences in terminology often make it difficult to compare the results of one study with the findings of another. To make matters even more complicated, not only do terms and cover terms differ, but what is used as a term by some might be used as a cover term by others, as Shriberg (1994) points out:

> In addition, different cover terms (or terms used to refer to the set of DF[14] types encountered in a study) have been used (e.g., "DFs," "(self)repairs," "(self)corrections," "reformulations," "restarts," "edits," and "hesitations"). To add confusion to matters, a cover term in one study is often equivalent to a term for a subclass in another study. For example, some authors use "hesitation" as a cover term (Maclay & Osgood, 1959; Blankenship & Kay, 1964) while others use it to refer only to DFs containing no changed material (e.g., Carletta, et al., 1993). Similarly, O'Shaughnessy (1994) uses "restart" as a cover term, but for Erman (1987), "restart" is one of "repetition," "restart," "insertion," and correction". "Disfluency" is used as a cover term by Lickley (1994), Fox Tree (1993), and in this work, but is one of "speech error," "self-repair," and "disfluency" in Postma, Kolk, and Povel (1990). (Shriberg, 1994, p. 11)

Differences in terminology also reveal differences in the approach to the phenomenon 'self-repair.' While psycholinguists primarily concentrate on the repairing segment – which they call 'repair' – conversation analysts are interested in more than just the replaced element. For them the term 'repair' refers to the totality of the repair strategy that includes all three parts, viz., repaired segment, initiation, and repairing segment. Furthermore, they are also interested in the conversational context in which self-repair occurs. It is hoped that further examinations of psycholinguistic

[14] DF is used by Shriberg (1994) as an abbreviation to designate disfluencies.

findings will reveal additional differences in the two approaches; they are also expected to clarify the benefits of psycholinguistic research for conversation analysis.

Levelt (1983) developed an alternative typology for overt repairs. He divides them into D-repairs, A-repairs and E-repairs. D-repairs are self-repairs made by speakers who want to change the message or the order of the message that they have already started. A-repairs are self-repairs produced by speakers who believe that their utterance needs specification, and E-repairs are self-repairs made by speakers who have discovered an error in their utterance. E-repairs are further subcategorized into EL-repairs, ES-repairs and EF-repairs. EL-repairs refer to lexical errors, ES-repairs refer to syntactic errors, and EF-repairs refer to phonetic errors. All overt repairs that do not fit into any of these categories are called R-repairs (for rest-repairs).

Levelt (1983) classified 959 self-repairs collected in an experiment. He found 25% covert repairs and 75% overt repairs. Among the overt repairs, 41% are E-repairs – which are mainly lexical errors (38%) –, 30% are A-repairs, 1% are D-repairs, and 3% cannot be classified.[15]

Another finding by Levelt (1983) and Cutler (1983) regards errors that remain uncorrected, i.e., where no repair takes place. Both researchers found that about 50% of the errors do not elicit self-repair or repair. According to them, this does not mean that those errors were not detected by the participants in their studies, but simply that

[15] Conversational self-repair analysis, however, would show different results (cf. Brédart, 1991; Van Hest et al., 1997; this study).

the participants decided that these errors needed no correction. A repair distribution thus reflects a speaker's 'selective attention' (Levelt, 1989, p. 463). Some errors get more attention than others, and this depends certainly on the type of errors, but also on the task at hand, and perhaps on individual characteristics of the speaker (cf. Van Hest et al., 1997).

These findings are highly relevant for conversation analysis and in particular for interlanguage pragmatics. For instance, an investigation into the relationship between repaired and non-repaired errors, as well as the relationship between classroom activity and non-repaired errors, will likely provide further insights into second/foreign language usage in classroom situations.

Another finding of psycholinguistic research on self-repair that is of interest to conversation analysts is the description and investigation of the 'main interruption rule' (Levelt 1989). Utterances in progress can be interrupted before the articulation of the repairable, while the repairable is being uttered (i.e., in mid-word) or after the repairable has been uttered (usually no later than two words after the repairable, cf. Schegloff, 1977).

> The position of the cut-off is of importance to self-repair research and speech production research in general. If speakers respect certain units, for example words, when cutting off an utterance, these units could be considered units of processing in speech production. (Van Hest et al., 1997, p. 90)

Levelt's main interruption rule states that speakers "stop the flow of speech immediately upon detecting trouble" (1989, p. 478). This rule is based on

Nooteboom's (1980) findings that 70% of all cut-offs are located at the first word boundary after the repairable. Nooteboom assumes that the speaker feels a first urge to stop immediately after detecting an error and another urge to complete the linguistic unit in production. Within-word cut-offs account for only 3% of all cut-offs, which led Nooteboom to believe that the second urge was stronger than the first one. Levelt's main interruption rule is a variation on Nooteboom's assumption but disregards the second urge altogether. Levelt found that the repairable itself is more often interrupted in mid-word than a correct ('neutral') word which follows the repairable.

Van Hest et al. (1997) note that further studies were undertaken by several psycholinguists to confirm or reject the main interruption rule. Although their findings are contradictory, many studies did find that word boundaries are not respected as often as Nooteboom's study would suggest.

Like Schegloff (1979), Levelt (1989) is also interested in the syntactic organization of repair, and like the former, he claims that self-repair is a syntactically regular process which he describes in a 'Well-formedness Rule' for self-repair. In his view, there is a syntactic relation of coordination between a false start and a restart:

> An original utterance plus repair <OR> is well-formed if and only if there is a string C such that the string <OC*or*R> is well-formed, where C is a completion of the constituent directly dominating the last element of O (or is to be deleted if that last element is itself a connective such as *or* or *and*).[16] (Levelt, 1989, p. 486)

[16] O = original utterance, R = repair proper, C = a string of zero or more words that is to complete the original utterance.

Van Wijk and Kempen (1987) show that Levelt's rule is too restrictive. It is applicable for those restarts which constitute a new syntactic structure, but not necessarily for word replacements in an unchanged syntactic structure. Moreover, the 'Well-formedness Rule' does not take so-called covert repairs into account, which, as this study will demonstrate, constitute a majority of all conversational self-repairs.

Levelt's (1989,1992, 1993) research on self-repair led to his development of the *perceptual loop theory of monitoring*. It provides conversation analysts with a model of the cognitive processes that lead to and govern self-repair strategies. The perceptual loop theory of monitoring is based on a modular perception of speech processing that postulates the existence of three knowledge stores, viz., the lexicon, the syllabary (which contains phonological information), and the store (which contains discourse models, contextual and world knowledge). It also assumes the existence of several autonomous processing components, the conceptualizer, the formulator, the articulator, the acoustic-phonetic processor and the parser (which was initially called the speech comprehension system). An individual's speech production starts with the conceptualization of her or his intended communication, followed by the encoding and the articulation of the message. Regarding speech perception, the message's perception starts with the acoustic-phonetic processing, followed by the decoding in the parser, and is finally interpreted by the conceptualizer. Most remarkable about this model is the fact that speech production and speech

comprehension are viewed as integral parts of the same system, which is not the case for other models (cf. Kormos, 1999).

The perceptual loop theory hypothesizes that the same processes are used to check one's own or another speaker's message; the parser thus attends to one's own and to another's communication. The author argues that three loops control the outcome of the speech production process. The first loop occupies the phase between the working of the conceptualizer and the formulator. It ensures that the preverbal message is identical to the intended message. The second loop occupies the phase between the working of the formulator and the articulator. It ensures that the verbal message is identical to the intended message ('covert or pre-articulatory monitoring'). The third and final loop is the external loop that checks the message after its articulation for errors or inappropriate lexical items and structures.

Shriberg is one of the few psycholinguists who analyze conversational data when examining self-repairs, which she calls 'disfluencies.' However, while she includes quasi-lexical fillers in her research, she does not examine lexical fillers. Shriberg (1994) shows that covert self-repairs can be viewed as displaying the same surface structure as overt self-repairs. They could therefore also be represented by Levelt's figure of the structure of overt repair.[17] Shriberg illustrates this with two

[17] See Figure 2-2.

examples, one that presents the structure of repetitions (32), and another which displays the structure of quasi-lexical fillers (33).

(32) Show me flights from Boston on on Monday

|-RM-| |-IM-| |-RR-|

(33) Show me flights from Boston on um Monday

|-RM-| |-IM-| |-RR-|

(Shriberg, 1994, p. 9)

Note that RM (reparandum) designates the repaired segment, IM (interregnum) indicates the editing phase or repair-initiation, and RR (repair) stands for the repairing segment.[18]

In repetitions, the repaired segment is therefore identical to the repairing segment, and the repair initiation is not necessarily hearable or otherwise detectable unless a filler is used between the first and second usage of the word in question (here: *on*). With fillers, the repaired segment is again identical to the repairing segment; however, this time it remains empty (it is not hearable), and the repair initiation contains the filler. Combinations of both self-repair types as well as of any of the two with other self-repair types are possible.[19]

[18] The author of the present study believes that in example (33) the position of RR should not be empty, but that the found word *Monday* represents the repair for the word search.

[19] See Chapter Four and Five of the present study.

One of the major goals of Shriberg's study is the discovery and analysis of regularities in disfluencies, a goal which she achieves after having determined a large number of regular patterns:

> Results showed regular trends in DF[20] rates by sentence length, by DF position, by presence of another DF in the same sentence, by DF type, by filled-pause form, and by combinations of these features both across and within speakers. Regularities were also found for pattern features of the DF, including the number of deleted words, the rate of word fragments, the rate and type of words in the interregnum (filled pauses, editing phrases, and discourse markers), and the occurrence of retraced words. (Shriberg, 1994, pp. 192-3)

Of particular interest to this thesis are four of Shriberg's findings. She reports that

1. male speakers use more quasi-lexical fillers than female speakers do;
2. there are large individual variances in the usage of self-repair;
3. self-repairs tend to co-occur; and
4. the most likely position for a self-repair to occur is within the repairing phase of another self-repair. Shriberg calls this a 'synergy effect.'

Speculating about the reasons for the co-occurrence or clustering of self-repairs, Shriberg writes:

> One possibility is that production of an initial DF causes a DF later in the sentence because the speaker is somehow distracted from the earlier DF. A second (and not mutually exclusive) possibility is that whatever is responsible for the later DF is also reflected in the planning of the sentence. (Shriberg, 1994, p. 111)

[20] DF is used by Shriberg (1994) as an abbreviation to designate disfluencies.

Shriberg's finding that men use more quasi-lexical fillers than women has been supported by Bortfeld, Leon, Bloom, Schober and Brennan (1999), who affirm that the 48 male participants in their study have a higher rate of disfluencies. They assert that this is due to a more frequent usage of quasi-lexical fillers than that of the 48 female subjects.

Lickley (1994) examined the perception of self-repair, a topic that goes beyond the scope of this thesis. However, in the corpus of conversational self-repairs – produced by three female and three male British speakers and used by Lickley for the purpose of studying how quickly and through which cues addressees recognize self-repair – he detects gender differences:

> It is interesting to note that, for our small number of informants, female speech was less disfluent than male speech in every case. (Lickley, 1994, p. 65)

In this study female speakers used fewer self-repairs per 100 words – and Lickley includes, as does the present study, all fillers, repetitions and false starts – than men do.

Lickley (1994) also found that function words, such as prepositions and articles, are far more often repeated than content words, such as nouns and verbs. His findings are supported by Maclay and Osgood (1959).[21]

A more recent study by Branigan, Lickley and McKelvie (1999)[22] reveals that females use fewer self-repairs than males under certain conditions, namely when they

[21] They will be supported by data from the present study as well

cannot see the person to whom they are talking. In this project, the 64 subjects do not produce conversational self-repairs, but they generate self-repairs when they perform a certain task, namely describing a route on a map to an addressee. The study does not show any differences in self-repair strategies based on the gender of the addressee. Other non-linguistic factors that do influence the rate of self-repair are task or role, familiarity of speaker and addressee, and familiarity with the task. The speakers who describe the route use more self-repairs than the addressee; those speakers who know each other produce more self-repairs than those who do not; speakers who cannot see the addressee when performing the task produce more repetitions than those who can, and speakers who carry out the same task a second time do not use as many repetitions as they did the first time. However, as Branigan et al. point out, non-linguistic factors may interact with each other to influence self-repair strategies:

> [...] the results suggest that different factors may interact in complex ways. Thus the speaker's ability to see the listener does not in itself significantly affect rates of disfluency; but an interaction of eye contact and speaker's sex turns out to exert a strong influence on both disfluency and discard rates. Hence, an important conclusion of this work is that it may be over-simplistic to expect simple relationships between non-linguistic factors and disfluency. (Branigan et al., 1999, p. 390)

This is an important point to keep in mind when the results of the present study are discussed and interpreted.

---

[22] It has to be noted that fillers were not part of the analysis of this study.

2. 4 Cross-linguistic approaches to self-repair

Although most studies of conversational self-repair concentrate on self-repair in English, repair organization in other languages such as Thai (Moerman, 1977), German (Selting, 1987; Weber, 1998), Finnish (Sorjonen, 1991), and African Akan (Gyasi Obeng, 1992) has been studied as well. Their results have been related by the investigators to the findings of Jefferson (1974), Schegloff et al. (1977) and/or Schegloff (1979). For the languages under investigation the findings, for the most part, confirm the earlier results. That means that repair organization as described in sections 2.2.1 and 2.2.2 is comparable across different languages. However, many properties and characteristics of self-repair remain to be studied in English and other languages. Their examination should not be limited to one language alone, for cross-linguistic studies of self-repair will provide further insight into a possible 'universal' grammar of self-repair.

As the present study is a cross-linguistic investigation of self-repair strategies, a review of other cross-linguistic examinations of self-repair is an essential part of this literature survey. Regrettably, only very few studies deal with self-repair in two or more languages.

Hayashi (1994) is a small, preliminary cross-linguistic study, and therefore only a short summary of its findings is provided here prior to a detailed presentation of Fox, Hayashi and Jasperson (1996). Both studies investigate self-repair – more specifically the interaction between self-repair and syntax – in (American) English

and Japanese, and both studies exclusively use self-repairs produced by native speakers.

Hayashi (1994) sets out to answer the question whether repair is "organized differently in languages that have different syntax" (Hayashi, 1994, p.78). However, he does not concentrate on differences alone, but reports similarities as well.

> Since repair always occurs in interactional environments in both languages, there must be some similarities in the organization of repair which result from the fact that speakers need to cope with interactional pressures. (Hayashi, 1994, p. 91)

Hayashi finds two major similarities in the organization of English and Japanese self-repair:

1. In both English and Japanese the repairing segment is organized in such a way that it is recognized as repair and not as a continuation of the repaired segment.
2. In both languages, syntactic coherence is always achieved in the repairing segment (pp. 90-91).

Hayashi also describes differences in the organization of English and Japanese self-repair. These differences are related to morpho-syntactic differences in both languages.

1. In English self-repair initiated within or just after a verb, the recycling almost always begins with the subject of the verb whereas in Japanese self-repair initiated within or just after a verb, the recycling remains within the verb.

2. In English self-repair initiated within an object noun phrase, the recycling may start at the beginning of the noun phrase or at the beginning of the entire clause of which the noun phrase is a part, whereas in Japanese self-repair initiated within an object noun phrase, the recycling never begins at the beginning of the entire clause, but at the beginning of the noun phrase (p. 91).

Hayashi (1994) argues that English is a relatively rigid SVO (subject verb object) -language, in which subject and verb form a closer unit than in Japanese, a SOV (subject object verb) -language with a very flexible word order in which subjects are often omitted. If they are not, they do not immediately precede the verb. This difference in the syntactic order might account for the first observed difference in self-repairs used in English and Japanese. Hayashi argues furthermore that in an English clause, components may be more tightly linked to each other than in a Japanese clause, which could explain the second difference in self-repairs used in English and Japanese.

Fox et al. (1996) undertook a large study in English and Japanese self-repair. They investigated 300 English self-repair examples from face-to-face and telephone conversations, 200 English self-repair instances from tutoring sessions, and 225 Japanese self-repair samples from face-to-face and telephone conversations. Concentrating on the syntax and the organization of self-repair from a cross-linguistic perspective in order to demonstrate how syntax and repair are

interdependent and co-organized, Fox et al. expand Hayashi's study and show that differences in repair organization correlate with differences in the syntactic practices[23] in the two languages.

The data were coded for the phrasal syntactic components that were constructed when the repair was initiated, and for the syntactic organization of the repairing segment. It was noted, for example, whether only the repairable was repeated, or whether the phrase or the whole clause was recycled. However, the syntactic categories that are appropriate for English are not necessarily appropriate for Japanese. While it is useful in English to separate subject or object noun phrases from prepositional phrases because only the former are never marked with an independent linguistic item, in Japanese such a distinction is not useful. Here, all noun phrases are marked with a postpositional case particle. The authors take such differences into account when coding and analyzing their data.

> In general we tried to be as true to the nature of the language under study as we could, rather than trying to force an unnaturally parallel treatment of both languages. (Fox et al., 1996, p. 195)

Fox et al. (1996) present three ways in which self-repair is organized differently in English and Japanese. The first is a morphological self-repair discovered in the Japanese corpus, but not in the English data. Example (32) shows

---

[23] The term is used to reflect the choice of Fox et al. (1996, p. 191). They write: "[...] we use the term *syntactic practices* rather than more traditional terms, such as syntactic resources, syntactic constructions, and so on. [...] first, since we view language as primarily for doing rather than for representing, we wanted to use a term that would remind us that syntax is an activity. Second, work on conversational data is sometimes dismissed as dealing with behavior (as in "performance") rather than with syntax per se (as in "competence")."

how speaker K exchanges a bound morpheme – the inflectional ending of the verb – with another bound morpheme.

(32) K: ja nanji goro ni kurida[shi-*]**soo**?[24]

then what time about OBL[25] go out

Then about what time (shall we) go out?

(Fox et al., 1996, p. 202)

In Japanese these types of morphemes consist of a full syllable and can be pronounced on their own, whereas in English, verb endings are not full syllables because they are only represented by single phonemes (*t*, *d*, or *s*, with the exception of the syllable *-ing*) and therefore cannot be pronounced by themselves. Moreover, Japanese is an agglutinating language and each morpheme has only one grammatical meaning, whereas English is a fusional language and morphemes can have different grammatical meanings. Hence, English morphemes are semantically more complex. Furthermore, verbal endings in English refer back to the subject, whereas in Japanese they do not refer back to anything. Japanese verb endings are not agreement markers.

> These three differences between English and Japanese verb endings suggest to us that at a variety of levels verb endings in English are more tightly "bonded" to the verb than are verb endings in Japanese and hence are less available for individual replacement than are verb endings in Japanese. (Fox et al, 1996, p. 203)

[24] In the examples taken from Fox et al. 1996 the repaired segment appears in square brackets, the repair initiation is marked with an asterisk, and the repairing segment is given in bold font.

[25] OBL = oblique.

Fox et al. further conclude that differences in self-repair strategies in the two languages might stem from a differently organized verb morphology.

A second type of difference regards the "procedures [employed] for delaying next noun due" (Fox et al., 1996, p. 204). English and Japanese share a number of self-repair strategies which allow speakers to gain time involving fillers (*uh*, *uhm*, *like*, *nanka*, *ano*, etc.). English speakers also use repetitions to delay the production of a noun, whereas Japanese speakers do not use this strategy "to delay the production of nouns" (p. 205). This might be because Japanese speakers have no function words preceding nouns to recycle, such as articles or prepositions, since Japanese does not have articles and prepositions, but postpositions, such as case-marking particles that follow the noun.

English speakers can thus repeat articles or prepositions[26] to gain time when searching for a noun, whereas Japanese speakers have to adopt a different strategy to delay nouns. One strategy consists in the usage of a demonstrative pronoun and a case particle followed by the noun and the identical case particle, which may, however, be omitted.

> The demonstrative pronoun serves as a place holder while the speaker looks for some lexically specific noun. (Fox et al., 1996, p. 206)

[26] Note that Lickley (1994) and the present study show that function words are more often recycled than content words.

The same strategy can involve an additional usage of fillers, such as the Japanese equivalents for *well, um, let's see* etc., before the utterance of the delayed noun.

> This is a useful strategy for speakers of a language which does not systematically provide phrase-initial grammatical material. Once again we see how it is possible that the syntactic practices employed by speakers shape the organization of the repair strategies that are used. (Fox et al., 1996, p. 206)

The third difference observed deals with recycling. It is a more general presentation of Hayashi's (1994) second distinction[27] and leads the authors to postulate a potential difference in the turn organization of the two languages. The pattern in English recycling is that either the local constituent – such as a noun phrase, a prepositional phrase and the like – which is being uttered when the self-repair is initiated, is recycled, or the whole clause of which the local constituent is a part is recycled. In Japanese conversation, however, only the local component is recycled, but never the entire clause.

Again, the reason for this difference is found in the syntactic organization of Japanese utterances. Japanese does not display a "tight syntactic organization" (p. 208) because what occurs early in the utterance is only loosely bound to what follows, and especially because Japanese speakers can omit the core arguments of a clause (object, subject) and even the nucleus (verb). Japanese is thus syntactically more loosely organized than a language like English, which requires these basic elements.

---

[27] See page 64.

English utterances, on the other hand, "show a higher degree of syntactic coherence" (p. 209) and Fox et al. (1996) argue that the difference in the management of recycling across the two languages mirrors this difference. Moreover, they believe that Japanese syntax affects its turn-taking system:

> We would like to suggest that these syntactic facts affect repair because they affect a crucial aspect of the turn-taking mechanisms of these two languages, namely projection. (Fox et al., 1996, p. 206)

Because the beginnings of Japanese turn-constructional units generally have no elements that syntactically project the remainder of the unit, the turn-taking management is different from the one employed by English conversationalists. The latter can use an early projection strategy because of the syntactic practices which they employ, whereas Japanese speakers use a "wait and see" strategy (p. 211), i.e., they have to wait longer until they can project the utterance or parts thereof.

More evidence for this suggestion is found in a study by Maynard (1989). She describes how Japanese speakers produce "bits of talk surrounded by pauses," which she calls 'Pause-bounded Phrasal Units.' Fox et al. take this phenomenon as an indication of a Japanese tendency to produce their turns in small units in which each component is syntactically independent from the next one, at least to a greater degree than in English conversations.

Moreover, in Japanese conversations speaker transition usually happens "at a point of grammatical completion followed by a pause" (p. 213). Japanese speakers are said to be end-oriented rather than beginning-oriented, whereas for English

speakers the opposite is true. This might explain why English speakers recycle further back than Japanese speakers do.

> In Japanese, projection may be done much more bit by bit than it typically is in English, and the organization of recycling reflects this fact. (Fox et al., 1996, p. 214)

After having presented their findings on self-repair differences in Japanese and English and having elaborated on how the syntax of a particular language can shape the repair organization, Fox et al. (1996) present a final argument about syntax and self-repair. They suggest that repair "expands the syntactic practices available to speakers of a language" (Fox et al., 1996, p. 214). In fact, the authors think that repair enables a speaker to create two different syntactic projections in one turn-constructional unit. They found that a repairing segment is not always meant to replace or to correct the repaired segment; instead, the speaker can also accomplish "competing interactional goals" with it before reaching the point where she or he has to yield the floor. This interpretation is reminiscent of Jefferson (1974), who was convinced that although 'error correction' would replace what was said previously, it would not make it "unsaid." This clearly meant that the information conveyed by repaired segment and repairing segment would be available to speaker and addressee throughout the conversation.

For Fox et al. (1996), however, the fact that competing interactional goals may be realized through the usage of self-repair strategies means far more than that. It has profound implications for researchers because it demonstrates that syntax and

interaction are not separable, but rather are two ways of looking at the same phenomenon. As Fox et al. (1996) conclude, "we may be better off thinking of syntax as a "hermeneutic for interpretation" [...], and "interaction as the occasion for the interpretation" (p. 227).

The differences found in English and Japanese conversational self-repair further suggest that it is important to study language-in-use not exclusively in English or a limited few other languages, but in as many languages as possible. By conducting cross-linguistic studies, or by relating studies in different languages to each other through consistent points of comparison, deeper and more accurate insights into phenomena such as self-repair will be gained.

2. 5 Self-repair strategies of second/foreign language users

According to Hayashi (1994) and many other studies, self-repair is not a chaotic but a well-organized phenomenon (cf. Schegloff et al., 1977; Schegloff, 1979; Shriberg, 1994; Fox & Jasperson, 1995; Fox et al., 1996; Jasperson, 1998; Weber, 1998). The reference to native speakers in Hayashi's conclusion is an observation of central relevance to this study.

> [...] the present study suggests that such seemingly chaotic, dysfluent [sic] 'performance' as repair is in fact highly patterned, and that native speakers of a language seem to know this 'grammar of repair', a way to be 'fluently dysfluent' as a part of their knowledge of the language. (Hayashi, 1994, p. 92)

Hence, Hayashi suggests that the organization of repair is an integral part of first language acquisition which is not explicitly taught. Since the 'grammar of repair' is not taught in the foreign language classroom, second/foreign language teachers and researchers seem to believe that, as is the case for a first language (L1), self-repair need not be taught to second/foreign language learners as well. However, Voss (1979) points out that second language speakers/learners of English have great difficulties recognizing and understanding self-repair, particularly fillers, in the language of native speakers, and Fayer and Krasinski (1987) confirm these results for second language speakers/learners of Spanish. It would seem therefore that the usage of fillers in a native speaker's speech leads to decreased comprehension by second language speakers/learners.

In addition to the comprehension of self-repair by second/foreign language learners, the production of self-repair by these learners has been investigated. Among the first investigators was Hieke (1981), who found that non-native speakers employ more self-repairs than native speakers do.

Seliger (1980) examined the relation between self-repair usage and learner types. He divides his subjects into High Input Generators, who tend to interact a great deal with their social environment, and Low Input Generators, who tend to interact little. Seliger discovered that there is a correlation between learner type and self-repair production. High Input Generators use more self-repairs than Low Input Generators do. The latter seem to plan their utterances very carefully, while the

former practice a policy of 'trial and error' and thus produce more errors and repairs than their more reserved peers do.

Wiese (1982, 1984) studied self-repair in L1 and L2 production in order to demonstrate that L1 and L2 production are distinct processes. His subjects are university students who had to perform a description task in their first language, either German or English, and in their second language, either German or English. Wiese determines that L2 speakers of both languages use more self-repairs than L1 speakers of both languages. He argues that L2 speakers make more errors than L1 speakers, and that they are also more inclined to correct them than L1 speakers are. He further infers that his results prove that L2 speakers need more time to plan their contributions, that they have an insufficient knowledge of their L2, and that they demonstrate a low degree of automatization in processing their second language.

Wiese, however, does not examine self-repair usage within subjects; this makes it impossible to account for individual variations which play an important role in self-repair production (cf. Shriberg, 1994, forthcoming). He also fails to explore the relationship between language proficiency and self-repair usage.

O'Connor (1988) analyzed the speech of beginning and advanced learners of French as a foreign language and discovered that beginners do not use more self-repairs than advanced learners do. However, they employ different types of self-repair: they utilize more corrective repairs than anticipatory repairs (i.e., covert repairs) while advanced learners use more anticipatory self-repairs. This result leads

O'Connor to claim that self-repair may be one instrument to measure L2 speakers' level of performance.

Temple (1992) investigated self-repair in the speech of native speakers of French and Australian second-year students of French as a foreign language. She measured speech and repair rate in both samples and discovered that native speakers appear to speak twice as fast as non-natives because of their frequent usage of fillers. The non-natives, on the other hand, employ more self-repairs and leave more errors uncorrected than the native speakers. Like Wiese, she concludes that L2 speakers display a low degree of automatization in L2 processing.

Lennon (1994) investigated self-repair with respect to the fluency of four L2 speakers of English at the beginning of, as well as at the end of, a six-month stay in England. At the end, Lennon's subjects were more fluent and more proficient, but they did not use fewer self-repairs. However, Lennon did not examine differences in self-repair types. Although the number of self-repairs did not decline, it is possible that the more fluent the speakers become, the more their self-repair strategies change and resemble those employed by native speakers.

Kormos (1999) reviewed psycholinguistic studies on self-repair in L2, focussing on their relevance for second language production and acquisition. She shows how Levelt's perceptual loop theory of monitoring can be adapted to describe monitoring in L2 speech. According to her, Levelt's theory needs to be combined with "research on consciousness, attention, and noticing in order to account for

mechanisms of error detection in L2" (Kormos, 1999, p. 303). Although her focus on monitoring theories is quite different from the central concerns of this study, her review of studies on L2 self-repair is very thorough. It also helps complement the present review and point to similarities and differences in L1 and L2 self-repair. However, she attends mostly to error correction, replacements, and false starts, but does not deal with fillers and repetitions.

Kormos (1999) points out that according to van Hest (1996), most self-repairs in L1 and in L2 follow Levelt's well-formedness rule. For Kormos, this suggests that L2 speakers – like L1 speakers – are capable of storing the syntactic structure of their intended message in working memory while repairing parts of their message.

Kormos (1999) also reports on studies that have concentrated on the relationship between error correction and error detection and have addressed the issue whether the latter is influenced by semantic features:

> Both van Hest (1996) and Poulisse and Bongaerts (1994) found that content words were more often corrected than function words. They explained these results by arguing that due to attentional limitations, the monitoring processes of L2 speakers focus more on content words than on function words, because the former carry more information.
>
> The results concerning differences in the detection of erroneous words with low and high information content indicate that in tasks where the emphasis is on successful communication, the available attention for monitoring in L2 speech tends to be directed towards meaning rather than form. (Kormos, 1999, p. 326)

However, it has to be remembered that the finding that function words are less frequently corrected than content words is not a characteristic of L2 self-repair,

since it is comparable to results obtained by Maclay and Osgood (1959) and Lickley (1994), who found the same phenomenon for L1 speakers, namely that content words are more often corrected while function words are more often repeated[28]. In other words, monitoring seems to focus on content rather than form in L1 as well as in L2.

Kormos (1999) concludes from the findings of psycholinguistic studies in L2 self-repair that limited metalinguistic awareness and a lack of automaticity in beginning L2 learners reduces their command of preplanning mechanisms and leads to a higher production of errors and a lower correction rate of these errors. More advanced learners, on the other hand, display a higher degree of metalinguistic awareness and automaticity, which increases their ability to use preplanning techniques resulting in fewer errors and a higher correction rate for those errors. Furthermore, Kormos contends that knowledge about the target language increases over time and that this knowledge is more efficiently applied.

> With the development of language skills, conscious controlled knowledge, which is prone to errors when put to use, is gradually replaced by automatic unconscious rule- or memory-based procedures, which, if stored correctly, are error free. (Kormos, 1999, p. 332)

However, Kormos does not consider the production of fillers and repetitions, which, as Temple (1992) points out, are used more frequently in the speech of native speakers compared to L2 learners. It may well be that the usage of fillers and repetitions increases as learners become more advanced.

---

[28] Unfortunately, repetitions were not considered in these studies reviewed by Kormos (1999).

Kormos (1999) also stresses that advanced learners' attention shifts from lexical, grammatical, and phonological errors to pragmatic and discourse level difficul-ties since the automaticity of their speech processes enables advanced learners to allocate more attention to monitoring their speech performance at the discourse level.

Finally, Kormos (1999) identifies a significant oversight in all existing studies of L2 self-repair. They neglect to examine the ratio between repaired and non-repaired errors:

> [...] without the examination of the ratio of corrected and uncorrected errors one cannot draw well-founded conclusions about how L2 speakers' attentional resources are divided between monitoring for content and monitoring for form. (Kormos, 1999, p. 334)

Van Hest et al. (1997), in presenting an overview of mostly psycholinguistic studies of self-repair produced by children and adult L1 and L2 speakers, point to a major gap in the research on L2 self-repair:

> [...] it is essential that large-scale investigations be conducted which focus on self-repair by L2 speakers at different levels of proficiency as well as on intra-individual comparisons between L1 and L2 self-repair. (van Hest et al., 1997, p. 85)

The present study seeks to fill part of this gap in analyzing the self-repair strategies of fluent bilinguals in their first and second language. In doing so, this study will draw on the concepts described in, and the terms used in, the conversation-analytic studies presented in Sections 2.2.1 and 2.2.2. It will also consider, and benefit from, the results of the conversational and psycholinguistic studies of fillers

(Section 2.2.3) and the findings of the psycholinguistic research surveyed in Section 2.3. The cross-linguistic studies reviewed in Section 2.4 will partially serve as a model for the cross-linguistic analysis of the data under investigation. Finally, the results of the research on L2 self-repair (Section 2.5) will be of help in the interpretation of findings regarding the self-repair strategies adopted by the participants in the present study in their second language. Furthermore, every single study reviewed here adds to the background knowledge on self-repair. This backdrop is necessary for the placement and interpretation of the findings of the current study. It also provides a basis for suggestions for future research.

CHAPTER THREE

DATA COLLECTION AND ANALYSIS

3.1 Introduction

The purpose of this chapter is to present the methodology developed and used to select, collect, transcribe, code, prepare and analyze the data for this study. The first part introduces definitions of the terms 'bilingualism,' 'conversational style,' and 'idiosyncratic filler' in the way in which they are used throughout this thesis. In the following part, the participants, data production and preparation are presented, and the methods of analysis are discussed. Finally, a summary of technical terms used is given.

3.2 Definitions

3.2.1 Bilingualism

Although this study is not an exploration into bilingualism itself, but an investigation of self-repair strategies *used by bilinguals* when engaging in everyday talk, the issues of bilingualism and language dominance have to be addressed.

Studies in bilingualism usually deal with only one of two aspects, namely individual bilingualism or societal bilingualism, also called bilingualism in communities or societies. The latter deals with topics such as the bilingual speech

community, language maintenance and planning, language change, bilingual education in the community, bilingualism and language policies and the like.

In this study, we are concerned with individual bilingualism, and as Baker and Prys Jones (1998) point out, there is no simple definition of individual bilingualism because many dimensions need to be considered. That makes it difficult to establish, in their words, a "concise and all-inclusive definition of a bilingual person" (Baker & Prys Jones, 1998, pp. 2-3):

> First, there is a distinction between ability in language and use of language. A person may be able to speak two languages, but tends to speak only one language in practice. Alternatively, an individual may regularly speak two languages but has a halting fluency in one language. People's ability or proficiency in two languages may be separate from their use of two languages. This is sometimes referred to as the difference between degree (proficiency or competence in a language) and function (actual use of two languages).
>
> Second, an individual's proficiency in a language may vary across the four language skills of speaking, listening, reading and writing. An individual may use one language for conversation and be fluent in speaking that language. However, he or she switches to another language for reading and writing. Another person may understand a second language very well, in its spoken and written form, but may not be able to speak or write it well, if at all. Such a person can be said to have a passive or receptive competence in a second language. (Baker & Prys Jones, 1998, p. 3)

Another dimension that has to be taken into account is the question of a balanced command of both languages. Few individuals are equally competent in two languages and use them equally often. The language that is the 'strongest' and 'best developed' is called the dominant language, but the dominant language is not necessarily the first language. Finally, Baker and Prys Jones (1998) mention that a

bilingual's competence can change over time according to differing circumstances. If individuals stop using a language because their speech community changes, they may lose their fluency in that particular language.

This project does not set for itself the challenge to create an all-inclusive definition of individual bilingualism. Rather, it seeks to describe the way in which all participants can be considered bilinguals in the two languages under consideration, English and German, and to determine which of these two languages may be considered their dominant language. To be chosen as a 'bilingual speaker' for the purpose of this study, potential participants had to meet the following criteria: They had to use English and German on a daily basis. They did not have to be equally proficient in both languages, but had to demonstrate a very high proficiency, a fluent, culturally aware, near-native command of English and German with regard to speaking and listening when participating in casual conversations. This is not to say that they would not be able take part in other types of discourse or that they could not read and write like a native in English and German; however, their abilities and skills in these areas were not of interest for this study. To establish the dominant language,[1] each subject was asked in which of the two languages she or he felt more proficient

[1] The term 'dominant language' is used in the field of bilingualism to distinguish between the 'stronger' (dominant) and the 'weaker' (non-dominant) language of a bilingual individual. It is necessary to have a technical term to express this distinction since not everybody's first language is his or her 'strong' language. However, since all eight participants in this study considered their first language to be their dominant language, the term 'dominant language' will no longer be used in this thesis; instead the terms 'first language', 'L1', 'native language', 'second language', 'L2' and 'non-native language' will be used.

when taking part in an everyday conversation. The dominant language was thus determined by the bilingual herself or himself.

3.2.2 Conversational style

The term 'conversational style' should not be confused with the notion of 'style' or 'speech style' discussed by Labov (1972b) or more recently by Azuike (1992). 'Speech style' describes particular language variations – highly formal or vernacular, to name both ends of the range – used by many speakers depending mainly on the formality or informality of the situation.[2] Conversational style, however, is different from one individual to the next.

The term 'conversational style' was first introduced by Deborah Tannen in 1984. Influenced by the research of Lakoff (1975, 1979, 1990), Gumperz and Hymes (1964), and Gumperz (1982), Tannen became interested in communicative style "and the notion that misunderstandings can arise in conversation [...] because of systematic differences in communicative style" (Tannen, 1994, p. 5). She herself began using the term 'conversational style' to designate "a person's way of talking" (Tannen, 1984, p. 9) and interpreting "meaning in conversation" (Tannen, 1984, p. 7). The added dimension of the way in which an addressee interprets what has been said made it necessary to use a term distinct from 'communication style.' Conversational style includes all linguistic and supra-linguistic devices that

[2] See also discussion of the term 'style' in Tannen (1984, pp. 8-9).

characterize an individual's speech, such as pace, loudness, intonation, the usage of pauses, the choice of words, polite formulae, topic choice, narrative strategies, and repair strategies. The manner in which these devices are used by an individual influences the way this individual interprets other conversationalists' usage of the same devices (Tannen 1984, 1986, 1989, 1990, 1994).

While Tannen concentrates on differences in conversational style – especially gender differences – and how they may provoke misunderstandings, other researchers concentrate on similarities:

> Analysis of conversational style reveals that we are not talking about individual speakers so much as groups of speakers sharing common styles. Interactive styles provide recognition criteria for subcultural groups, and indicate dimensions of difference that are significant for cultural members. (Eggins & Slade, 1997, p. 36)

The present study will focus on similarities and differences in conversational style with regard to one aspect, the use of self-repair strategies.

In Chapter Four a very rough conversational portrait based on the quantitative analysis of this study will introduce each of the participants. For that purpose, terms like 'talkative,' 'verbose,' 'taciturn,' 'taciturnity,' and the like will be employed. These terms do not connote a value judgement.

3.2.3 Idiosyncratic filler

The term 'idiosyncratic filler' is introduced to describe a filler type that is used unusually often by one individual to fill hesitation pauses or other gaps in her or

his turn. It is usually a particular *lexical* filler that is used as often as or more often than all other lexical fillers combined. For each individual, the idiosyncratic filler may be a different filler.

The need to create a code and then a term for an individually distinctive filler arose when, after the transcription and a first skimming of the conversations, the researcher noted that most subjects used one particular lexical filler unusually often in their non-dominant language conversation. This filler was named 'idiosyncratic filler' not only because it is distinct and different for most of the participants employing it, but additionally on account of the fact that it is a noticeable device that gives their conversation a unique, individual mark or style because of its dominance among all other fillers.

3.3 Data

3.3.1 Subjects

The subject group consists of eight volunteers, professors and graduate students from two departments at the University of Alberta in Edmonton. Thus, they are well-educated and of middle-class socioeconomic status. There are four females and four males between the ages of 23 and 63. Five participants, Gordon, Henry,

June, Lauren, and Sue,[3] are native speakers of English and three subjects are native speakers of German: Isabel, Sven, and Werner.

Prior to taking part in the study, all participating subjects signed a consent form and filled out a brief questionnaire giving the researcher background information about their personal characteristics and their use of and proficiency in both languages, English and German. Table 3.1 provides an overview of the subjects and their most important characteristics without revealing their identity.

Table 3.1: Overview of participants

Participants	**Dominant language**	**Age group**	**Profession**
Gordon	English	53-63	professor
Henry	English	53-63	professor
Isabel	German	23-33	graduate student
June	English	23-33	graduate student
Lauren	English	23-33	professor
Sue	English	23-33	graduate student
Sven	German	23-33	professor
Werner	German	53-63	professor

[3] Pseudonyms are used for all subjects, and throughout the thesis all names, places, and other identifying information drawn from the corpus have been changed in the interest of maintaining the subjects' anonymity.

All eight participants are bilingual, using English and German on a daily basis. For all candidates, the dominant language is their first language. None of them had grown up as a bilingual, but had learned the second language initially in a school setting and developed it subsequently in an immersion situation.

Certain criteria were used for the selection of the subjects for this investigation. All participants had to demonstrate a very high degree of proficiency on all levels (i.e., phonological, grammatical, lexical, semantic, and stylistic) regarding their communicative skill in English and German when engaging in casual conversations. Accordingly, the participants' dominant language was defined as the language in which they considered themselves to be the most competent in a casual, everyday speech situation.

3.3.2 Data collection

Data collection took place in a multi-media room at the University of Alberta in Edmonton, Canada, between September 24 and October 6, 1997. All subjects were aware that they were being videotaped for research purposes, although they were unaware of the exact nature of the research.[4] While the participants engaged in conversation, they were by themselves in the media room. The researcher left the room immediately after having operated the video equipment before and after each

[4] Since the researcher was known for her interest in American Sign Language, most participants assumed that their non-verbal behavior would be the focus of attention. After the data collection was finished, the focus of the investigation was disclosed to all participants during an informal get-together.

conversation. But although the researcher was not present, the camera was, and it was visible at all times.

For ethical reasons, it is not acceptable to record the conversations without the participants knowing it and agreeing to it. An issue that has thus to be considered is the 'observer's paradox' as discussed by Labov (1972a), Tannen (1984), Straehle (1997), and others. The observer's paradox states that the character of what is being observed changes because it is being observed; the phenomenon can thus never be captured in its 'natural' state. However, the fact that the participants did not know what the focus of the observation and analysis was, and the fact that participants tend to forget that they are being recorded (cf. Tannen, 1984, p. 34), should minimize problems that might have arisen from the observer's paradox.

For every participant, four different speech events of about twenty-five to thirty minutes[5] each were videotaped in an experimental setting. The speakers engaged in two casual, dyadic conversations - one in English and one in German - with a same-gender partner first and with an opposite-gender partner thereafter. The first two conversations were taped consecutively. The last two were recorded consecutively approximately a week later. The participants could choose whether they wanted to have the first conversation in English or in German; they switched to the other language after 30 minutes when the researcher entered the room to exchange the videotapes.

[5] Conversations nine (C9) and ten (C10) are exceptions. Because of technical difficulties the recording of C9 and C10 is only fifteen minutes long.

The participants were asked to talk as naturally as possible about a casual topic of their choice or about their favorite novel, movie, or travel destination. As the conversations took place at the beginning of the academic year, most participants did not know each other yet and used this opportunity to get better acquainted.[6]

The data collection yielded 420 minutes of casual conversation, 210 minutes of English conversational data and 210 minutes of German conversational data.

3.3.3 Transcription

For the purposes of this study, and in order to be able to analyze efficiently the self-repair strategies used in these sixteen conversations, the recorded data were transcribed. A transcription, however, does not simply transform a spoken event into a written one. The process of transcribing is an interpretive process (Mischler, 1991, p. 259) because the transcriber decides how much (or how little) detail is going to be 'frozen' on paper and thus available for analysis. It is important that the researcher is aware of the interpretive nature of transcribing and the fact that she needs to choose *according to her research question* what to transcribe and what to ignore. When preparing the transcription of the sixteen conversations in question the researcher kept in mind what Edwards (1993) points out:

> The transcript plays a central role in research on spoken discourse, distilling and freezing in time the complex events and aspects of interaction in categories of interest to the researcher. When well-suited to the theoretical orientation and research question, the

[6] Table A1 in Appendix A presents an overview of all sixteen conversations.

> transcript enables the researcher to focus efficiently on the fleeting events of an interaction with a minimum of irrelevant and distracting detail. (Edwards, 1993, p. 3)

For this study, it was most important to have access to the verbal aspects of the conversation without neglecting other devices relevant to self-repair. Therefore, all verbal components as well as all pauses and sound lengthenings were included in the transcript. In addition, excited or emphasized delivery of one or several lexical items, overlap, code-switches, and laughter, as well as audible inhalations and exhalations were transcribed. Particular attention was given to quasi-lexical manifestations, such as 'uh' and 'uhm.' These are quasi-lexical fillers that the hearer tends to omit because they do not add important information to the meaning of an utterance. However, for this study, they are of great importance and thus were included accurately and meticulously into the transcript.

Nonverbal aspects such as pace, pitch, tone, and volume were not included in the transcript because the quality of the equipment precluded a flawless and troublefree recording. Moreover, nonverbal aspects were not considered relevant for the particular focus of this research, but they were reconsidered during the analysis phase and included where patterns were recognizable.

Body language like gestures, facial expressions, and eye contact were not recorded in the transcript because the quality of the videotapes did not allow for a completely accurate transcription of these details. In addition, it has to be noted that most subjects assumed that this study would be about gestures, body postures, mimic

and the like, and some might have paid particular attention to their body language, thus making it unfit for investigation.[7]

In addition to the content of a transcript, its arrangement is important. Edwards writes:

> If a transcript is to be analyzed mainly by reading through it line by line, it is important that information be preserved in a form which enables the researcher to extract the main information as quickly as possible without overburdening short term memory. (Edwards, 1993, p. 6)

Although the qualitative analysis of the self-repair strategies employed in the sixteen conversations was not exclusively based on the transcript, but included repeated listening and viewing sessions of portions of the videotapes, it was nonetheless very important to create a transcript that seemed particularly 'reader-friendly' to the researcher. For this reason a vertical arrangement of turns, and the units of which they are composed, was chosen. This most widely employed format (Edwards, 1993, p. 11) appeared more readable to the researcher than a column or partiture format. A short sample of the transcript is displayed together with the employed transcription conventions in Appendix B.[8]

---

[7] This would clearly be an aspect very much affected by the above-discussed observer's paradox.

[8] This sample is preceded by the codes used in this study and followed by the coded section of the same sample.

3.3.4 Coding

The transcript was divided into units. The clause or a modified clause was chosen as the basic unit. A modified clause is a reduced form of a sentence that includes one verb and all elements occurring with it. It does not need a verb if the verb is suppressed or if the unit consists of a one-word or brief utterance that is not considered a minimal response or back-channeling but a short and meaningful answer. In that case, that short answer forms a full turn.[9] The unit can also include two verbs if they are part of a listing, as in unit 151 of the following example. 152 of the example is a unit that does not contain a verb. The verb 'fahren' (*go*) or 'fliegen' (*fly*) is suppressed.

(1) C1 WE149:[10] die Leute [...] eh fahren auf die Malediven für zehn Tage

people [...] uh are going to the Maldives for ten days

C1 WE150: es gibt 'nen Direktflug von Wien auf die Malediven

there is a nonstop flight from Vienna to the Maldives

C1 WE151: dort taucht und schwimmt man ungefähr neun Tage lang

[9] Following Sachs, Schegloff and Jefferson (1974, 1978) a turn is defined as a meaningful verbal expression that one speaker makes before the next speaker takes the floor. A turn can consist of a single word, one utterance or several utterances.

[10] Every example taken from the sixteen conversations under investigation is preceded by a combination of letters and numbers. They indicate from which conversation the example is taken (C1 for conversation number one); who is talking (here Werner is) and with which of the speaker's units the example starts (here the example starts with Werner's 149th unit).

there one <u>dives and swims</u> for about nine days

C1 WE152: und am zehnten Tag wieder zurück

and back again on the tenth day

Although the intonation unit – also called 'phonemic clause' (Brown & Levinson, 1987, p. 155) – is currently the preferred unit with which to segment conversational data, it was not chosen here, because it is pause-bounded, and very large individual differences in the use of pauses in the conversations under discussion were found; hence, applying the same criteria to every speaker would have resulted in one-word units for some and several clauses for others. For this reason the modified clause seemed to be the most appropriate division for this data set. It made the units not necessarily uniform in length, for there are shorter and longer clauses, but they differ much less than phonemic clauses would.

The main coding process started once the data had been divided into units. It is a very complex and detailed procedure to classify all instances of a particular device – here self-repair – that is the focus of attention. Lampert and Ervin-Tripp (1993) describe it very accurately.

> The process of classification and labeling is commonly referred to as "coding," and on the surface, coding appears to be a relatively simple task: (a) identify the information that you wish to recover, (b) select mnemonic abbreviations or numbers as codes to represent that information, and (c) do it – match codes to actual cases in your data base. (Lampert & Ervin-Tripp, 1993, p. 169)

This process was followed exactly. The information needing to be coded were elements of self-repair. A system of progressive differentiation of categories

was developed. A first list with the different self-repair types was established which consisted of fillers, false starts, repetitions and altered repetitions.[11] A second, more detailed list identified all the possible fillers and the linguistic structures in which false starts may occur and which may be repeated or partially repeated. The fillers were first put into three separate categories, viz., lengthening of sounds or sound combinations when used to fill a hesitation pause or gap in the conversation; quasi-lexical fillers; and lexical fillers. The lexical fillers were further divided into four

Table 3.2: Overview of all observed fillers

Fillers	**English**	**German**
Quasi-lexical	uh, uhm etc.	eh ehm etc.
Lengthening[12]	stretched sound or sound combination represented by =	stretched sound or sound combination represented by =
Lexical		
Miscellaneous	yeah, okay, well, anyway, so, whatever, right?	ja, nee, na, also, da, so, ja?, ne?, nicht?, und/oder so
'I mean'	I mean, I think, I believe, I find, I guess	ich mein(e), ich glaub(e), ich find(e), ich denk(e)
'You know'	you know	weißte, weißt du, wissen Sie
Idiosyncratic	depends on the subject[13]	depends on the subject

[11] An altered repetition is a partial or otherwise modified repetition in which the lexical or quasi-lexical item or items are not repeated in exactly the same way as they were first articulated. Examples may be found in Appendix C.

[12] Lengthened quasi-lexical fillers or lexical fillers are not included in this category, only other lengthened lexical items are.

[13] See definition under 3.2.3 in this chapter.

different sub-categories: 'miscellaneous,' 'you know,' 'I mean,' and 'idiosyncratic.' Table 3.2 gives an overview of all the different fillers and shows which lexical fillers fit into which subcategory.

The linguistic structures that can be repeated or partially repeated and with which false starts can occur are the following:

- adjective
- adverb
- conjunction
- definite article
- demonstrative pronoun
- indefinite article
- noun
- noun phrase
- personal pronoun
- possessive pronoun
- preposition
- prepositional phrase
- pronoun + verb (or VP)
- interrogative pronouns & words
- relative pronoun
- verb

- verbal phrase

For all of these different types of self-repair mnemonic abbreviations or codes were selected; well-known abbreviations were employed wherever possible.[14] Finally, all the units were carefully scanned and labeled with the appropriate codes. They were used in a linear way in their order of occurrence whenever a unit contained more than one self-repair. There were, of course, numerous units that did not contain any self-repair. They remained without label.

Not every repetition was considered to belong to the class of self-repair, however. A speaker might repeat a lexical item for emphasis to intensify its meaning or the meaning of another word, as in the following utterance:

(2) C8 LA16: I try very hard TO .. WORK VERY VERY INTENSELY between eight and five

Or a speaker might repeat lexical items to hold the floor when being interrupted by the addressee, as in the following example:

(3) C3 SV125: and I've had .. [1 I've had not too stressful hours 1]
C3 GO148: [1 yeah /yyyy/ when 1]

Or a speaker might repeat lexical items when suspecting that they could not be heard the first time because of a disturbing noise, or because s/he interrupts the speaker and tries to gain the floor, as in the following example:

(4) C3 GO254: take your sore leg [1 and wag it in the- 1]

[14] For a list of the codes used see Appendix B.

C3 SV178: [1 and they have 1] they have also some some panels in Kinsmen

Those repetitions that for obvious reasons can be classified as the exceptions mentioned above were not coded and thus not examined because they cannot be considered self-repair.

A short sample of a coded conversation excerpt is given in Appendix B.[15]

3.4 Analysis

3.4.1 Data preparation

Once the data were transcribed and coded, further preparations had to be made in order to facilitate quantitative and qualitative analysis. First, all codes had to be counted to find out which strategies were used most often, and to select the most frequently-occurring ones for analysis. To minimize human error, the counting was done by a computer program developed specifically for this purpose.[16] The results of that process are presented in Table C1 in Appendix C.[17]

A total of 6,603 self-repairs was found in the data set – 2,900 in the English corpus, which comprises 31,333 words, and 3,703 in the German corpus, which

[15] This sample is preceded by the corresponding excerpt from the transcript.

[16] I want to thank Georg W. Rieger who kindly developed the program for this study.

[17] The table is followed by examples for each subcategory of self-repair types that were not presented and analyzed in this study.

comprises 31,028 words. The data sets do not differ significantly in size regarding word production, but they do differ significantly in the quantity of self-repair tokens.

Not every occurring self-repair was analyzed. Both a quantitative and a qualitative analysis require a considerable number of tokens for the different types and subcategories in all four conversations. Therefore, only the sixteen most frequently employed subcategories were chosen for analysis. These consist of all the fillers and the ten most frequent repetitions and false starts. As a result, each subcategory contains at least 79 tokens,[18] guaranteeing a sufficient quantity for quantitative and qualitative analysis. Table 3.3 presents an overview of the data set and distinguishes between the analyzed and non-analyzed tokens.

Table 3.3: Overview of data set

Data set	**English**	**German**	**Total**
Words	31,333	31,028	62,361
All self-repairs	2,873	3,516	6,389
Analyzed self-repairs	2,514	3,090	5,604
Fillers (all analyzed)	1,701	2,402	4,103
Analyzed repetitions	630	516	1,146
Analyzed false starts	183	172	355
Unanalyzed self-repairs	359	426	785

[18] For a list of the ten most frequent repetitions and false starts see Table 5.1 in the introduction to Chapter Five or top of Table C in Appendix C.

Conversational style accounts for, among other things, the quantity of words and turns a speaker produces when taking part in a conversation. How much a person says is a highly individual aspect of her or his speech. That explains why the eight participants' contribution to the database under investigation varies significantly in quantity. However, a person who says a lot in a certain period of time also creates more opportunities for self-repair than a person who talks little in the same period. In order to make their contributions comparable and, hence, accessible to quantitative analysis, all the participants' contributions – i.e., the number of their self-repair types and subcategories – in all four conversations were standardized by mathematical manipulation. They were all multiplied by a different factor – depending on the number of words uttered – to adjust the size of their conversational contribution to the largest conversational contribution which was made up of approximately 3,500 words. That way each participant's four conversations were standardized for 3,500 words per conversation and thus became comparable to the others.[19] The resulting numbers were rounded to the nearest integer. For example, Sue spoke 2,917 words in her English conversation with Lauren. The factor was calculated by dividing 3,500 by 2,917, i.e., the number of words she spoke. The result and thus the factor used to multiply all her self-repairs in that particular conversation was 1.199. Sue used, for instance, 67 quasi-lexical fillers in that conversation. To determine how many she would have produced had she spoken 3,500 words, 67 is multiplied with the factor

[19] In Table D in Appendix D all factors employed are displayed.

1.199. The result is 80.333 quasi-lexical fillers and if rounded to the nearest integer, there were 80 quasi-lexical fillers in Sue's 3500-word English conversation with a same-gender partner.

3.4.2 Quantitative analysis

After the data had been standardized for 3,500 words for every conversation, each subject's self-repair strategies could be compared in a quantitative manner in the four different situations. For all the different self-repair subcategories considered for analysis, their standardized frequencies in all four conversations were compared. They were grouped together for those self-repairs that occurred in the English conversations and those that occurred in the German conversations. They were also grouped together for those that occurred in the same-gender conversations and those that occurred in the opposite-gender conversations. The analysis was performed separately for fillers and for the ten most frequent repetitions and false starts.

To measure statistical differences between the frequencies of self-repairs employed in either situation a chi-square test was used. If, according to the results of a 2x2 chi-square test, no statistically significant difference was found between self-repair strategies in the English and German conversations, it was inferred that this particular participant did not change her or his conversational style with regard to self-repair when switching languages. If no statistically significant difference was found between self-repair strategies in the same-gender and opposite-gender

conversations, it was inferred that this particular participant did not change her or his conversational style with regard to self-repair, no matter if the addressee was a same- or opposite-gender partner. If, however, statistically significant differences were found either for one, the other, or both conversational situations, then changes in the conversational style of that person were observed, and it was argued that the conversational style was indeed affected by language and/or the gender of the addressee.

This procedure was followed for all eight participants and their results were then compared to each other in order to make more general claims. It was argued that differences in self-repair strategies related to the language employed could stem from two different sources, the (structure of the) language in question or the fact that the participant was speaking a first or a second language. In order to determine the different sources for the observed differences in conversational style, the results were presented for one aspect (language in question) and for the other aspect (native or non-native language), and then cross-compared. If the detected differences were observed for at least four participants in the same language and not for more than two in the other language, it was concluded that the differences must be due to the (structure of that) language. If, however, the detected differences were observed for at least four participants in the non-native language but for no more than two in the native language, it was argued that the differences must be due to the fact that a non-native language was used. A cross-comparison between the two and the number of

tokens in both languages will help determine the reason for the observed difference in question. A difference in frequency must not only be observed for four participants, but also result in a significant difference in the number of total tokens.

The same procedure was followed to find out whether differences stemmed from the fact that a participant spoke to a same-gender or opposite-gender partner, or to the fact that a participant spoke to a man or a woman.

All of the results regarding similarities and differences in the frequency of the usage of particular self-repair subcategories helped evaluate the hypotheses presented in section 1.2.3 of Chapter One.

3.4.3 Qualitative analysis

The qualitative analysis of fillers, repetitions and false-starts used by the bilingual participants when engaging in English and German conversations is situated within the framework of interactional sociolinguistics with its basic assumption that "the meaning, structure, and use of language is socially and culturally relative" (Schiffrin, 1994, p. 98) and its emphasis on the importance of context, shared knowledge, contextualization cues,[20] conversational involvement and conversational inference for the encoding and interpretation of meaning in discourse (Schiffrin, 1994).

[20] Contextualization cues are "aspects of language and behavior (verbal and nonverbal signs) that relate what is said to the contextual knowledge (including knowledge of particular activity types: cf. frames; Goffman, 1974) that contributes to the presuppositions necessary to the accurate inferencing of what is meant (including, but not limited to, the illocutionary force)." (Schiffrin, 1994, pp. 99-100)

In analyzing the situated meaning of each filler, each repetition and each false start – viz., taking its linguistic and interactional context into account by drawing from the linguistic environment, contextualization cues, conversational inference and the interactants' shared knowledge and conversational involvement – recurrent forms could be matched up with recurrent functions in the particular conversational situations under investigation. Self-repair subcategories could thus be described in terms of form and function in English conversations and in German conversations. They could then be compared to each other in order to arrive at more general conclusions. By investigating the above devices in the particular context in which they were used, and by comparing their application in every conversation for every single participant, it may be described how individuals change their conversational style with respect to the language that they speak and with respect to the gender of the addressee with whom they speak. By comparing each subject's repair strategies in the different conversational situations, statements about the repair strategies in German and English conversations and in same-gender and opposite-gender conversations could be made.

Not every analyzed example can be displayed in the body of this thesis. In the following two chapters, at least one representative example from the German conversations and at least one representative example from the English conversations of each participant and each subcategory has been chosen to be discussed and to

illustrate the patterns found in the entirety of all tokens of that subcategory. All examples presented are thus representative, unless otherwise stated.

Most subjects in this study spoke about very personal topics, such as their family, their personal and academic background, their research, and their favorite pastimes, making it very difficult to protect their identity. For ethical reasons, however, it is imperative that the author does not reveal her subjects' identity. All examples presented are therefore very short, consisting of a single utterance or only part of a single utterance. This means that valuable linguistic and interactive context information is missing from the thesis, making it very difficult to the reader to fully comprehend the qualitative analysis. Some translations from German utterances into English might also seem strange or simply incorrect. Here again, the larger context, which is unknown to the reader, determined the translation.

The results from the qualitative analysis were used in combination with those from the quantitative analysis in order to verify or falsify the three hypotheses described in section 1.2.3 of Chapter One.

3.5 Summary of technical terms used

3.5.1 Self-repair

Self-repairs are phenomena that designate some kind of trouble – an error, an inappropriate lexical or structural choice, a word search or some other untimely interactional or linguistic planning – in the spontaneous speech of a speaker. A self-

repair consists of three elements: the repaired segment containing the repairable or trouble source, repair initiation, also called editing phase or interregnum, and the repairing segment, also called repair.

There are several types of self-repair:

a. hesitations or word searches,

b. fillers,

c. repetitions or recycling,

d. replacements,

e. false starts and restarts or fresh starts.

3.5.2 Hesitations, gaps and fillers

Hesitations or word searches are one of several possible types of self-repair. They are pauses that delay the production of the next lexical item(s) while the speaker is involved in linguistic and cognitive planning.

Gap is a more general term and designates openings in the conversation.

Both hesitations and gaps need to be filled; otherwise the speaker will lose the floor. They are filled with place-holders, namely quasi-lexical fillers (*uh*, *uhm*), lexical fillers (*well*, *you know*, *right*, *I mean*, etc.) or the lengthening of sounds.

Lexical fillers typically fulfill more than the function of filling gaps and hesitations. At the same time they meet interactional, social, and linguistic requirements, such as engaging the addressee, yielding the floor, asking for

feedback, stressing the content of an utterance, making it sound more friendly, and the like. Because of their interactional functions lexical fillers are often regarded as discourse markers.

Fillers – especially quasi-lexical fillers – often make up the repair initiator of another self-repair, like hesitations and word searches, repetitions, replacements, or false starts.

3.5.3 Repetitions

Repetitions – also called recycling – consist of the consecutive usage of the same quasi-lexical or lexical item(s). They are one of several possible types of self-repair if they are not used to stress or emphasize what is being said, and if they are not used as a strategy to hold the floor.

For repetitions, the repaired segment and the repairing segment are identical. The repair initiation might not be audible, or might contain silent pauses or fillers.

3.5.4 False starts

A speaker performing a false start stops in mid-utterance within or after a lexical or quasi-lexical item and then either:

a. restarts it where it was interrupted without adding or changing anything, or

b. restarts it where it was interrupted, changing one or several elements, or

c. restarts it where it was interrupted adding one or more new elements, or

d. produces a fresh start that is syntactically, semantically and/or pragmatically different from the original utterance, or

e. abandons the utterance.

False starts make up the repaired segment of a self-repair whose repairing segment consists of a restart, a fresh start or an abandonment. In this study, the focus will be on the false start, and not on the repairing segment.

CHAPTER FOUR

SELF-REPAIR STRATEGIES: FILLERS

4.1 Introduction

This chapter examines the strategies used by the participants in this study to fill hesitation pauses and other gaps occurring in conversations. For each of the eight subjects the variety of fillers which they use in all four conversations will be presented and analyzed in a quantitative and qualitative manner. This analysis will determine whether, and how, the language which they speak - English or German - and/or the gender of their interaction partner changes their linguistic behavior when they hesitate. The characteristics of each person's conversational style will then be compared to those of the other subjects in order to search for attributes that are common to several subjects, to a group of subjects, or to conversational situations. In the final part of the chapter these findings will be critically evaluated.

Hesitation pauses are one of several possible types of self-repair. In fact, as devices for delaying the production of the next lexical item or items, they are one of the most common types of self-repair strategies employed (Fox et al., 1996). But there are additional functions attributed to these pauses. Psycholinguistic and sociolinguistic research has revealed that besides fulfilling the function of verbal and/or cognitive planning, hesitation pauses in spoken conversations serve interactive and symbolic purposes, too (e.g., see discussion in Hänni, 1980; Levinson, 1983, chap. 6; Stenström, 1994). Some of the hesitation pause and gap

fillers that will be discussed here fulfill several functions simultaneously, as will be demonstrated below.

In this chapter, the focus of attention is on the *filling* of hesitation pauses and other gaps. Speakers have to indicate to the addressee that they are not about to yield the floor when hesitating, for if hesitation pauses remain unfilled the current speaker might lose the floor. Hesitation pauses and gaps are filled with quasi-lexical manifestations, such as 'uh,' 'erm,' 'err,' 'eh,' 'ahem,' 'uhm,' 'muh,' 'hmm,' 'huhm,' and 'mmhmm,' or they are filled with lexical items such as 'well,' 'you know,' 'I mean,' and the like in English conversations and their German counterparts in German conversations, namely 'also,' 'ja,' 'ich meine,' 'ne?' etc.[1] Sometimes a speaker might also lengthen a sound or sound combination to fill a hesitation pause.

Regarding the function of fillers it has to be noted that a filler can play more than one role. Like interactional signals and discourse markers, fillers can fulfill different functions either simultaneously or at different times in different contexts, in the same position or in different positions. What Stenström (1994) claims for signals and markers holds true for fillers as well:

> The following characteristics of signals and markers should be kept in mind:
> - They can fill more than one gap in the exchange
> - They can fill more than one slot in the turn
> - They can do different things in different places
> - They can do different things in the same place
>
> (Stenström, 1994, p. 61)

[1] These utterances are not only used to fill hesitation pauses. They may be used in different contexts to fulfill different functions, such as back-channeling (cf. Owen, 1981; Stenström, 1994, chapters 1-3).

In the following, it will be described how the eight participants in this study fill hesitation pauses and other gaps in their conversations. Before the different fillers used by the different participants are presented and analyzed in a representative selection of examples, the different functions of these fillers will be discussed. Although the following overview of the form and functions of all the different fillers precedes the analysis of the fillers it is based on that analysis.

In addition to lexical fillers, the participants use two very versatile filler types: quasi-lexical fillers and the lengthening of vowels or sound combinations. Lengthening can occur at any time in any lexical or quasi-lexical item. Vowels are more often lengthened than other sounds or sound combinations. Lengthening primarily serves the purpose to play for time when the speaker needs to search for a word, a syntactic structure, or when the speaker has some other verbal or cognitive planning to do. Lengthening, however, can also be employed to emphasize or stress a particular part of an utterance. In that case, the segment containing the stretched sound or sounds might display additional prosodic features.

Quasi-lexical fillers can also be used at any time in any position, namely at the beginning, the middle, or at the end of turns, turn-constructional units, clauses, or phrases. The end position is, of course, more rarely used for hesitations and therefore for fillers in general and quasi-lexical fillers in particular because the need to plan the next item rarely arises at the end of units, but rather at the beginning of the next unit. However, hesitations may occur in the end position, for instance, when the speaker is not quite sure whether she or he has successfully made her or his point.

The researcher's decision whether a particular filler belongs to the end of a unit rather than the beginning of the next unit is primarily made based on the occurrence, or lack of occurrence of short, unfilled pauses. If no unfilled pause occurs before a filler, but follows it, the filler is regarded as belonging to the previous unit and therefore is considered to be in an end position. If an unfilled pause precedes the filler it is regarded as part of the next unit and therefore stands in an initial position. In uncertain cases, prosodic elements are taken into account as well. Sometimes a filler occurs in a separate tone unit, in other words, it is preceded and followed by a short, unfilled pause. This happens with some lexical fillers which then usually fulfill a double function, and the non-hesitant function determines whether the filler stands in a final or initial position. These cases will be discussed below.

The participants in this study utilize a variety of lexical fillers. In English these are:

- yeah
- okay
- well
- anyway
- you know
- I mean/I think/I believe/I guess
- so
- whatever
- right?

In German the used lexical fillers are:

- ja
- nee
- na
- also
- ich mein(e)/ich denk(e)/ich glaub(e)/ich find(e)
- weißt du?/weißte?
- da
- so
- ja?
- ne?
- nicht?
- und/oder so

Hesitation pauses and other gaps, like self-repairs in general, may occur at any given moment in a conversation. Therefore fillers appear in different utterance positions. It has already been mentioned that any position is available for the two most versatile filler types, namely the quasi-lexical fillers and the lengthening of vowels or sound combinations. Lexical fillers may also be employed in different positions, but depending on the kind of lexical fillers used, they occupy certain positions. Fillers like 'yeah,' 'okay,' 'ja,' and 'nee' often fulfill double functions. If in addition to playing for time they express agreement or acknowledgement or if they serve as an uptake or any other link to what the previous speaker has said, they are found at the beginning of a turn or turn-constructional unit. If, on the other hand,

they are fillers and furthermore are meant to emphasize what the current speaker says, they are used at the end of turn-constructional units or other units. In the latter case, they may also appear in the middle of a turn-constructional unit, but do so less frequently.

'Well' and 'anyway' are introductory fillers that are found most often at the beginning of turns, turn-constructional units, clauses or phrases. In addition to serving as a filler and an introductory device, 'well' also creates a link between what has been said previously and what is about to be said, whereas 'anyway' does not create such a link between previous and up-coming turn-constructional units; it rather introduces a topic or subtopic shift or change.

The German filler 'also' has similar properties as the English 'well.' It can serve as an introductory device and/or as a linking device, and as such is used at the beginning of units. Like 'well,' 'also' can appear in the middle of turn-constructional units and then it often precedes nouns which are thereby emphasized. However, 'also' can occur at the end of turn-constructional units, too, which has not been observed for 'well.' When the German 'also' appears at the end of a unit it is found in a separate tone unit, often uttered with a falling tone. It emphasizes the speaker's statement, thus drawing the addressee's attention to it, or it serves as a 'social' or interactional device that engages the addressee to make her or him feel part of the interaction.

A number of fillers can be used in all positions, namely at the beginning, in the middle, or at the end of turns, turn-constructional units, clauses, or phrases. The German 'also' belongs to this class as has already been demonstrated. The following

fillers are also members of that class 'you know,' 'I mean,' and similar expressions, such as 'I think,' 'I guess,' 'I believe,' and the like, as well as their German equivalents, and the English 'so,' as well as the German 'na,' 'da,' and 'so.' In addition to fulfilling the function of a filler they may simultaneously have other functions which vary for different positions. In initial position, they play introductory roles and/or create links between what has just been said and what is about to be said. In middle positions, they can emphasize parts of the utterance or solicit understanding and sympathy. This is especially true for 'you know' and 'I mean,' which can fulfill this particular function in any of the three available positions. In end positions, these versatile lexical fillers often engage the addressee, frame, or emphasize what has just been said.

A number of fillers typically occur at the end of turn-constructional units, clauses, or phrases. These are 'right?,' 'nicht?,' 'ja?,' 'ne?,' 'und so,' and 'oder so.' Usually, they also fulfill a double function. With the exception of the last two, they are fillers and solicitors of agreement, brief response, and/or attention, and they engage the addressee. 'Und so' and 'oder so' may engage the addressee, too.

Sometimes several fillers are used in combination, that is, at the same time in the same position to fill a single hesitation pause. This can be a sign that the speaker is at a loss for words, has lost the thread of thought, or tries to convey several things at the same time. Next to bringing her or his point across by the content of the utterance itself the speaker wants to make sure that her or his intentions are not misunderstood. A multitude of fillers makes an utterance sound less matter-of-fact, friendlier, and the listener feels more involved (e.g., Stenström, 1994, p. 64).

Stenström (1994, p. 69) observes that combinations of fillers tend to occur at the beginning of turns in the so-called 'global planning area' "where the rough planning of the entire utterance takes place."

4.2 Overview of the participant data

Table 4.1: Summary table of total number of words produced, number of self-repairs and number of fillers

	Total number of words produced	**Number of self-repairs calculated for 3,500 words**	**Number of fillers calculated for 3,500 words**
Sue	12,510	396	270
Lauren	4,810	403	199
June	6,020	313	227
Isabel	8,521	291	160
Gordon	11,290	536	317
Henry	6,221	430	278
Werner	6,024	323	229
Sven	6,965	255	152

Even though every participant in this study took part in four conversations of approximately the same duration, namely twenty-five to thirty minutes,[2] they did not all produce the same number of utterances or words. Their self-repair and hesitation

[2] June's and Werner's conversations (C9 and C10) are exceptions. Because of technical difficulties the recordings of Conversation 9 and 10 are only 15 minutes long.

strategies also differ, and consequently they do not produce the same number of self-repairs and fillers either. Table 4.1 presents an overview of these data.

4.3 Sue's filling of hesitation pauses

Sue is a native speaker of English. She is the most talkative among the eight participants in this study. In all four conversations she uttered a total of 12,510 words. She is also one of the subjects who use the most self-repairs including hesitation pauses. She uses an average of 396 self-repairs among which there are 270 filled hesitation pauses for 3,500 uttered words per conversation. Thus, her conversational style can roughly be described as being verbose and prone to hesitations and other types of self-repair.

The quantitative representation of Sue's behavior regarding the filling of hesitation pauses is shown in Table 4.2. The category 'miscellaneous' contains different lexical fillers, such as the English 'yeah,' 'right?,' 'so,' the German 'also,' 'ne?' 'ja,' and others.[3] The table includes chi-square values (χ^2) to indicate statistically significant (or insignificant) differences between two frequencies.

In the English conversation between Sue and Lauren, Sue uses exactly the same number of quasi-lexical fillers as lexical fillers, namely eighty. On the other hand, in her English conversation with Sven, Sue uses twice as many quasi-lexical fillers than lexical ones. Also, in her German conversation with Lauren she utilizes approximately the same number of quasi-lexical as lexical fillers and again, when

[3] For a complete list of all miscellaneous fillers and how often they have been used by which participant in this study, see Appendix E.

talking to Sven, this time in German, she makes use of a lot more quasi-lexical fillers than lexical ones.

Table 4.2: Sue's filling of hesitation pauses

Fillers	**ES**	**EO**	**GS**	**GO**	**E**	**G**	χ^2	**S**	**O**	χ^2
Lexical	80	52	166	130	132	295	61.9*	246	182	9.7*
Miscellaneous	24	16	100	84	40	184	91.9*	124	101	2.4
'I mean'	34	25	25	9	58	34	6.4*	59	33	7.2*
'You know'	23	11	0	0	34	0	34.0*	23	11	4.0*
Idiosyncratic	0	0	41	37	0	78	77.5*	41	37	.2
Quasi-lexical	80	109	160	227	189	386	67.3*	240	336	16.0*
Lengthening	20	19	18	19	40	37	.1	38	39	.0
Total	181	180	343	376	362	719	118.1*	524	556	0.9

Legend: E = English, G = German, S = Same-gender partner, O = Opposite-gender partner. Data standardized for 3,500 words per conversation. All frequencies have been rounded to the nearest integer. χ^2 for $p \leq .05 \geq 3.84$ (1df). An asterisk indicates a significant chi-square value.

In all her conversations Sue employs a variety of lexical fillers which will be illustrated below. It is apparent as well that she uses different numbers of quasi-lexical fillers in all four conversations. She utilizes significantly more with an opposite-gender partner than with a same-gender partner. The same is true when comparing her German data with the English ones. Here, she makes use of more than twice as many quasi-lexical fillers when talking in her L2 compared to when speaking in her L1. Correspondingly, for the total number of hesitation pause fillers she employs more than twice as many fillers when speaking German. On the other

hand, for the total number of fillers there is no different usage depending on the gender of her interaction partner. She also utilizes more 'I mean' fillers in her English conversations compared to her German conversations and with her same-gender partner compared to with the opposite-gender partner. It is also noteworthy that in her German conversations Sue has two specific fillers that she uses almost exclusively. They are 'ja?' and 'also.' 'Also' is the one that she uses most often and that has been represented in Table 4.2 under the heading of 'idiosyncratic' filler. In her English data there is no single filler used unusually often. Finally, it is observed that she makes use of 'you know' as a filler twice as often when talking to a woman than when talking to a man.

It has been noted that Sue uses a variety of fillers. In her English data those include 'yeah,' 'okay,' 'well,' 'you know,' 'I mean,' 'I think' 'right?,' and others as shown in the following examples taken from Sue's English conversations with Lauren (C8) and Sven (C12).

(1) C12 SU6:[4] yeah it's probably a lot easier for you then yeah [...]

(2) C8 SU19: okay .. but not with German .. okay

In examples (1) and (2) 'yeah' and 'okay' are used in an entirely similar way. The first 'yeah' as well as the first 'okay' signal agreement and create a link with what has been said previously by her interaction partner. The second 'yeah' and 'okay' stress the agreement. In addition, they also fulfill the function of filler. In Sue's speech when conversing in English with Lauren or Sven 'okay' and 'yeah,'

[4] Every example is preceded by a combination of letters and numbers. They indicate from which conversation the example is taken (C12 for conversation number twelve); who is talking (here Sue is) and with which of the speaker's units the example starts of (here the example starts with Sue's 6th

when used as filler, almost exclusively appear at the end of a clause and/or turn-constructional unit. 'Okay' and 'yeah' are used as back-channeling devices as well or at the beginning of an utterance to signal agreement.

'Well,' on the other hand, is typically used as a hesitation pause filler at the beginning of a clause or turn-constructional unit, as in the following examples:

(3) C8 SU82: well those are the advantages of [...]

(4) C12 SU216: well I'll do this as my language elective [...]

Sue does not use 'well' in middle positions. An interesting occurrence of three consecutive uses of 'well' in Sue's conversation with Sven is shown as a brief exchange in example (5). It is noteworthy because she does not use 'well' as a filler frequently in the remainder of her English conversations.

(5) C12 SU379: ☺ well we'd like to think so ☺

C12 SV181: so how would you compare Alberta to that?

C12 SU380: well I mean ..

C12 SV182: is Alberta the most American province of Canada?

C12 SU381: well I don't know .. Western I would say [...]

'You know' belongs to the versatile class of lexical fillers that might be used either at the beginning, the end, or in the middle of a clause or turn-constructional unit. In example (6) Sue uses it at the beginning of a turn-constructional unit; in example (7) she uses it at the end, and in example (8) 'you know' appears in the middle of her turn-constructional unit.

---

unit). As mentioned under section 3.4.3, every example is short because ethical issues hindered the inclusion of more context.

(6) C8 SU32: and you know with that type of thing too you can sit there with a glass of WINE [...]

(7) C8 SU4: it would be difficult for me this time of the day you know [...]

(8) C8 SU175: and we would call each other on the weekend and just you know cry [...]

Like 'you know,' 'I mean,' and similar expressions such as 'I think' and 'I guess' can be used either at the beginning, the end, or in the middle of a clause turn-constructional unit. In example (9) Sue uses it at the beginning of a turn-constructional unit; in example (10) she uses it at the end, and in examples (11) and (12) 'I think' appears in the middle of her turn-constructional units.

(9) C8 SU99: yeah I I mean I really haven't found that much of a difference [...]

(10) C12 SU99: gosh I had problems the first couple of weeks I mean [...]

(11) C8 SU149: at that time I think the whole thing was such a novelty [...]

(12) C8 SU212: this illustrates the difference I think between the two universities [...]

'Right?' is one of those fillers that occur at the end of turn-constructional units and engage the addressee. Sue utilizes it in this manner as demonstrated in examples (13) and (14):

(13) C8 SU271: in German all through the 100 and 150 level right? [...]

(14) C12 SU222: as practical as that can be in the arts .. right? [...]

It is also remarkable that Sue sometimes uses different lexical fillers in combination, such as 'well I mean' in utterance (380) of example (5) and '(oh) well you know' in examples (15) and (16). All these examples contain 'well.' In fact, no occurrence of a combination of lexical fillers without 'well' was found in Sue's data.

(15) C8 SU308: I thought oh well you know my contact with Austrian people has been [...]

(16) C8 SU351: I would always say well you know I taught my students that [...]

Sue fills her hesitation pauses not only with lexical fillers, but with a lot of quasi-lexical fillers as well. It has been mentioned that quasi-lexical fillers are very versatile and that they can occur at the beginning, in the middle, or occasionally also at the end of a clause or turn-constructional unit. They often appear in combination with other quasi-lexical fillers, lengthening, and/or other devices to delay the production of the next item or items, such as lexical fillers or repetitions. In example (17) the first quasi-lexical filler is used on its own in the middle of a turn-constructional unit. The second and third occurrences are used in combination with repetitions in the middle of a turn-constructional unit, and the last one is used on its own at the beginning of a turn-constructional unit.

(17) C12 SU305: but secondly for some reason uhm most of the people I spoke with uh felt .. felt uhm gosh I I I don't know how to describe that uhm it was like an inferiority complex [...]

Sue occasionally uses lengthening as well to fill a hesitation pause as shown in example (18):

(18) C8 SU29: I mean nothing that would BE .. s=o uh .. mentally taxing

Sue also uses a variety of lexical fillers in her German conversations. Here they include 'ja,' 'also,' 'ich mein(e),' 'so,' 'ja?' as illustrated in the following examples taken from Sue's German conversations with Lauren (C7) and Sven (C11):

(19) C11 SU80: also nur mit der Grammatik hatten sie Probleme ja= [...]
(also) *only the grammar caused them problems* (ja=)

(20) C11 SU175: ja man erwartet also diese Perspektive nicht find ich oder ja
(ja) *one doesn't really expect this perspective I find or* (ja)

(21) C11 SU87: und eh ja und eh u= genau [...]
and uh (ja) *and eh ou= exactly* [...]

'Ja' is one of those filler that are most often used as introductory fillers or linking devices, as demonstrated in examples (20) and (21). However, Sue uses 'ja' in all three positions. In example (19) she emphasizes what she just said and appeals to the addressee as well. In example (21), in which 'ja' is used twice at the beginning and at the end of her turn-constructional unit, Sue frames her utterance, thereby emphasizing it. Unlike in example (1) and (2) where 'yeah' and 'okay' are used to

signal agreement, this first 'ja' is not used to signal agreement because another utterance of Sue's preceded this one.

'Also' is the lexical fillers that Sue uses the most. Together with 'ja?' – which will be discussed later – her idiosyncratic filler 'also' gives her German conversations a unique mark. It can be used either at the beginning (example (22)), the end, or in the middle (example (23)) of a clause or turn-constructional unit. Its preferred position, however, is at the beginning of a turn-constructional unit. In all her data Sue uses it only once at the end of a turn-constructional unit, as illustrated in example (24), where she lets the addressee know that this is not a rhetorical question.

(22) C11 SU88: also ich kann immer fragen [...]
(also) *I always have the opportunity to ask someone* [...]

(23) C11 SU82: aber reden und also Alltagssprache ... das war viel besser [...]
but speaking and (also) *everyday speech ... that was a lot better*

(24) C7 SU7: was be- bedeutet bis jetzt? ☺ also
what does until now me- mean? ☺ (also)

'Ich mein(e),' 'ich find(e),' 'ich glaub(e),' and the like belong to the same class as the English fillers 'I mean,' 'I guess,' 'I think' etc., and they are used in a similar manner. But even though they can be used either at the beginning, the end, or in the middle of a clause or turn-constructional unit, in her German conversations, Sue almost exclusively uses them in the middle, as can be seen in examples (26) and

(27). In example (25) she seems to use 'ich mein' in the middle of a turn-constructional unit, but in fact she abandons her first turn-constructional unit and starts a new one with a combination of lexical fillers, 'also' and 'ich mein.'

(25) C11 SU111: ja eh gibt es dann eh also ich mein natürlich in meinem ersten Jahr [...]

(ja) *uh is there then uh* (also) (ich mein) *of course in my first year*

(26) C11 SU175: ja man erwartet also diese Perspektive nicht find ich oder ja

(ja) *one doesn't expect* (also) *this perspective* (find ich) *or* (ja)

(27) C11 SU235: na ja aber auf jeden Fall das das passiert auch bei uns dass wir uns glaube ich auf diese eh angewan- angewandte Linguistik was Caroline studiert konzentrieren [...]

(na ja) *but in any case that that happens with us as well that us we* (glaube ich) *focus on that applie- applied linguistics that Caroline studies* [...]

Sue uses 'so' as a filler only occasionally, but she uses it in different places. In example (28) she makes use of 'so' in the middle of a turn-constructional unit; in example (29) she uses it in a separate tone unit at the end of a turn-constructional unit in combination with the fillers 'ja?' and in example (30) she starts a turn-constructional unit with 'so.'

(28) C11 SU106: aber mit deinem Fach so hast du je eh einen Kurs auf eh auf Englisch in deinem Fach unterrichtet?
but in your field (so) *have you ever uh given a course in uh in English in your field?*

(29) C11 SU84: das was ich kann ist aus- war aus dem Buch ja? .. so ☺
all that I know I learned it from the book (ja?) .. (so) ☺

(30) C7 SU55: so und dann se- sitzt man in Vancouver
(so) *and then one si- sits in Vancouver*

'Ja?' is the filler that Sue uses the second most. Together with 'also,' it is the one that gives her German conversations a 'signature style.' Sue uses 'ja?' the way 'right?' is used in English conversations, almost exclusively at the end of a turn-constructional unit, as illustrated in examples (31), (32), and (33):

(31) C11 SU100: und ich komme morgen mit der Antwort zurück ja?
{☺}
and tomorrow I will come back with the answer (ja?)
{☺}

(32) C11 SU130: also im Laufe der Zeit bekommt man diese Lehrerfahrung ja?
(also) *over the years one gains this teaching experience* (ja?)

(33) C7 SU31: und ich bezahle hundert Dollar mehr .. ja?
and I pay one hundred dollars more .. (ja?)

In her German conversations like in the English ones Sue sometimes uses different lexical fillers in combination, such as 'ja? so' in example (34) and 'also ich mein' in example (35).

(34) C11 SU84: das was ich kann ist aus war aus dem Buch ja? .. so ☺

all that I know I learned it from the book (ja?) .. (so) ☺

(35) C11 SU111: ja eh gibt es dann eh also ich mein natürlich in meinem ersten Jahr [...]

(ja) *uh is there then uh* (also) (ich mein) *of course in my first year*

Sue also fills the hesitation pauses in her German conversations with more than lexical fillers. She uses quasi-lexical fillers abundantly. In example (36) the first 'eh' is used at the beginning of a turn-constructional unit and in combination with the lexical filler 'ja,' and the second one is still regarded as being at the beginning of that same turn-constructional unit, and it precedes a false start. In example (37) the quasi-lexical filler is used in the middle of a turn-constructional unit in combination with the lexical filler 'also.' Finally, in example (38), the quasi-lexical filler is used on its own at the end of a turn-constructional unit. It has to be noted that Sue rarely uses quasi-lexical fillers at the end of turn-constructional units where she has a definite preference for the lexical filler 'ja?'.

(36) C11 SU87: und eh ja und eh u= genau [...]

and uh (ja) *and uh ou= exactly* [...]

(37) C11 SU68: oh das war auch .. vom Gefühl her also eh schwer genug

oh that was also difficult with respect to (also) *uh my feelings*

(38) C11 SU171: und ☺ und dann sind wir am Ende ehm ... aber es gibt schon [...]

and ☺ and then we're done uhm ... but there are [...]

Regarding the lengthening of sounds to fill hesitation pauses it can be observed that Sue displays a similar behavior in all four conversations. She occasionally uses lengthening as shown in example (39):

(39) C7 SU192: u=nd obwohl das auch eine Großstadt ist [...]

a=nd even though that's a large city too [...]

Considering the quantitative and the qualitative analysis of Sue's data regarding the filling of hesitation pauses, it is apparent that her conversational style changes depending on the language she speaks and the gender of the interaction partner with whom she speaks. When speaking German, Sue hesitates more often and utilizes both more lexical fillers and more quasi-lexical fillers. On the other hand, it has been observed that she uses more 'I mean' fillers in her English conversations. The variety of lexical fillers she uses in German is slightly smaller than the range she employs in her English conversations. In addition, it has been observed that in her L2 conversations she utilizes two lexical fillers 'ja?' and 'also' more frequently than all other ones combined, which gives her German conversations a signature style. When talking to an opposite-gender partner Sue does not hesitate more often, but she uses more quasi-lexical fillers than lexical ones, whereas when she speaks to a same-gender partner she uses an equal number of both

types of fillers. She also employs more 'I mean' fillers when talking to Lauren compared to when talking to Sven. It was noted as well that she uses 'you know' more often when conversing with a woman.

4.4 Lauren's filling of hesitation pauses

Lauren, a native speaker of English, is the least loquacious among the eight subjects of this study. In her four conversations she uttered a total of 4,810 words. She is also one of the subjects that use the most self-repairs, including hesitation pauses. She used an average of 403 self-repairs, among which there are 199 filled hesitation pauses for 3,500 uttered words. It is noticeable that she uses other types of self-repair more often, namely 204, than filled hesitation pauses. This is unusual. Every other subject in this study uses more filled hesitation pauses than all other types of self-repair combined. Hence, Lauren's conversational style can roughly be described as being disposed to taciturnity and prone to hesitations and even more inclined to the usage of other types of self-repair.

The quantitative representation of Lauren's behavior regarding the filling of hesitation pauses is displayed in Table 4.3. Her idiosyncratic filler is the German 'also.'

In her English conversations Lauren uses approximately the same number of quasi-lexical fillers and lexical fillers. In her German conversations, however, she employs more lexical fillers than quasi-lexical ones. She also utilizes significantly more fillers overall in her L2 compared to her L1. While in English she uses miscellaneous and 'I mean' fillers more often than in German, in her L2 she has a

particular filler, namely 'also' that she employs almost exclusively as lexical filler. 'Also' can thus be described as her signature filler in the German conversations. In her English data, on the other hand, there is no single filler used unusually often. Even though she uses 'I mean' often, it is not as prominent. Regarding gender-specific behavior, there is no difference in Lauren's filling of hesitation pauses observed based on the gender of her interaction partner.

Table 4.3: Lauren's filling of hesitation pauses

Fillers	**ES**	**EO**	**GS**	**GO**	**E**	**G**	χ^2	**S**	**O**	χ^2
Lexical	71	72	132	127	143	259	33.7*	203	199	.05
Miscellaneous	15	39	19	12	55	32	6.1*	35	52	3.4
'I mean'	54	32	3	16	86	19	43.6*	56	48	.7
'You know'	2	0	0	0	2	0	2.2	2	0	2.2
Idiosyncratic	0	0	110	99	0	209	209.0*	110	99	.6
Quasi-lexical	77	68	95	72	145	167	1.4	172	140	3.5
Lengthening	15	18	28	20	33	48	2.7	43	38	.3
Total	164	158	255	218	321	473	29.2*	418	376	2.3

Legend: E = English, G = German, S = Same-gender partner, O = Opposite-gender partner. Data standardized for 3,500 words per conversation. All frequencies have been rounded to the nearest integer. χ^2 for $p \leq .05 \geq 3.84$ (1df). An asterisk indicates a significant chi-square value.

In all her conversations, Lauren uses a small variety of fillers, which will be shown below. That diversity is slightly larger in her native language. Finally, it can be noticed that she makes scarce use of 'you know' and does not use it at all in her

conversation with Henry, which could be gender-specific behavior or coincidence. The small numbers do not allow any generalization.

It has been remarked that Lauren uses a small variety of fillers. In her English data those include 'well,' 'you know,' 'I mean,' 'so,' 'right?,' and others as illustrated in the following examples taken from Lauren's English conversations with Sue (C8) and Henry (C16). Lauren uses 'well' as a filler in the same manner as other participants in this study do, namely as an introductory filler at the beginning of a clause or turn-constructional unit. Example (40) illustrates this:

(40) C16 LA27: well I wasn't allowed to work [...]

In Lauren's conversation with Henry there is also an interesting occurrence of consecutive uses of 'well.' Only this time both subjects use it several times in a brief exchange presented in example (41).

(41) C16 LA120: well I I struck out as far as that one

C16 HE229: well you couldn't find it that would that would be a good place to to inquire

C16 LA121: oh they told me to come over and ask at the U of A It's like well that will be my department

C16 HE229: you might find it in uh the Extension-

C16 LA125: well explain that to me what is the Faculty of Extension? I mean whenever-

C16 HE232: well it used to be it used to be a= not a faculty but department or division an organization of courses [...]

Lauren also uses the filler' you know,' which belongs to the class of lexical fillers that might be used either at the beginning, the end, or in the middle of a clause or turn-constructional unit. However, Lauren uses it so seldom that in the data at hand it only appears at the end of a turn-constructional unit as shown in example (42):

(42) C8 LA100: I am pretty well known for being over-organized you know

'I mean' and similar expressions such as 'I think' and 'I guess' can be used either at the beginning, the end, or in the middle of a clause or turn-constructional unit, too. This is the filler type that Lauren employs most often in her English conversations and she does it in all three positions. In example (43) she uses 'I mean' at the beginning of a turn-constructional unit; in example (44) 'I mean' appears in the middle, and in example (45) 'I mean' occurs at the end of her turn-constructional unit. Example (46) shows how Lauren uses 'I mean' twice in the same turn-constructional unit, to frame her utterance she employs it once at the beginning and once at the end. It should also be noted that Lauren uses 'I mean' almost exclusively in this class of fillers. She does not use similar expressions such as 'I think' or 'I believe' as fillers.

(43) C16 LA61: I mean it was ridiculous [...]

(44) C16 LA3: and I didn't I mean I didn't see the winter [...]

(45) C8 LA62: it's very VERY DIFFERENT from linguistics I mean [...]

(46) C8 LA187: I mean did other people talk about that? I mean ?

Lauren rarely uses 'so' as a filler, nevertheless she does so in two different positions. Example (47) illustrates how she utilizes it twice at the beginning of a turn-constructional unit and example (48) shows Lauren's usage of 'so' in a separate tone unit at the end of a turn-constructional unit.

(47) C8 LA46: so so .. it was .. Wednesday only [...]

(48) C16 LA68: which might have prevented me from making some of my destinations .. so

In Lauren's English conversations there are a few occurrences of the fillers 'right?' at the end of turn-constructional units as demonstrated in example (49):

(49) C16 L101: there were there were originally a lot of Germans in Edmonton right?

Like most other participants, Lauren also uses different lexical fillers in combination such as 'anyway I mean' in example (50) 'well I mean' in example (51) or 'so I mean' in example (52). It is also remarkable that in all her combinations the fillers 'I mean' occurs.

(50) C8 LA87: anyway I mean it's really it's better to to to defend [...]

(51) C8 LA351: well I mean I DID TEACH the whole time

(52) C16 LA52: uh so I mean I had to use the grant money

Next to lexical fillers, Lauren utilizes quasi-lexical fillers to fill her hesitation pauses. She uses most of them at the beginning of a turn-constructional unit, some in the middle, and very few at the end. In example (53) the quasi-lexical filler is used on its own at the beginning of a turn-constructional unit, whereas in example (54) it is used in combination with a repetition in the middle of a turn-constructional unit.

The last example (55) illustrates the usage of a lengthened 'uhm' in combination with a lexical filler at the end of Lauren's turn-constructional unit. It should also be noted that this is the only occurrence of 'yeah' as a filler in Lauren's data.

(53) C8 LA3: u=h I don't have ups and downs with German {☺☺}

(54) C16 LA64: that I got a uh got a brand new car

(55) C16 LA5: so I I can't really compare but- as far as the weather goes but u=hm yeah

Sometimes Lauren also employs lengthening to fill a hesitation pause or gap in her English conversations as shown in examples (53) and (55) for the lengthening of quasi-lexical items. One of Lauren's rare lengthening of a lexical item can be seen in example (56).

(56) C8 LA205: [...] I started talking that way about a month and a half into my sta=y

Lauren uses a small variety of fillers in her German conversations. Here they include 'also,' 'ich mein(e),' 'ja,' 'ne?,' quasi-lexical filler, and lengthening of sounds as can be seen in the following examples taken from Lauren's German conversations with Sue (C7) and Henry (C15).

Lauren uses 'ja' as a filler, but although she does so rarely, she uses 'ja' in all three positions, as illustrated in example (57) for the initial position, example (58) for the initial and middle position, and example (59) for the end position.

(57) C7 LA67: ja wie sagt man das denn auf Deutsch ☺

(j=a) *how do you* say that in German ☺

(58) C15 LA83: ja Sie kommen ja aus Europa

(ja) you come (ja) from Europe

(59) C15 LA9: das wußte ich sogar ja

I even knew that (ja)

Lauren's most prominent feature regarding fillers in her German conversations is the usage of 'also.' She uses it most often in initial positions of a clause or turn-constructional unit and she frequently uses it in the middle but only seldom in end positions. Sometimes she uses more than one 'also' in a single turn-constructional unit as illustrated in example (60) where she uses three. The first one appears at the beginning, the second one in the middle, and the last one at the very end.

(60) C15 LA75: ja also ss- ss- die die haben auch ganz gute Leute bekommen also Mike und und Brendan also

yeah (also) *they they have also gotten very good people* (also) M*ike and and Brendan* (also)

Even though Lauren uses 'I mean' very abundantly in her two English conversations, the German equivalent 'ich mein(e),' and others of the same type like 'ich find(e) and 'ich glaub(e),' is used very little by Lauren and never in the first position, which was the preferred place in the English data. In example (61) she uses 'glaub ich' in the middle of a turn-constructional unit and in example (62) 'glaub ich' appears at the end of her turn-constructional unit. This last one engages the addressee who feels compelled to agree.

(61) C5 LA159: e=h das das mich hindert ist glaub ich mein mein Französisch

uh what's holding me back (glaub ich) is my my

French

(62) C15 LA32: das wär schlimm für unser Programm glaub ich

that would be bad for our program (glaub ich)

Lauren also uses the fillers 'ja?' at the end of a turn-constructional unit, but she does so only sporadically. Example (63) shows one of those rare occurrences:

(63) C7 LA9: ja also 'ss= bei mir es ist eher eine Frage der Politik ja?

yeah well for me it is rather a question of politics (ja?)

For the same purpose and in the same way as 'ja?,' Lauren also seldom uses 'ne?' as can be seen in example (64):

(64) C15 LA11: das war ja nun Zufall ne?

that was really a coincidence (ne?)

Analogously to her English conversations, Lauren sometimes uses a combination of lexical fillers in her German conversations, too. Here, they always consist of 'ja also' as illustrated in example (65). It is noteworthy that her English combinations and her German combinations both always contain the most used lexical filler, either 'I mean' or 'also.'

(65) C7 LA104: ja also .. progressiv hat in den USA eine ganz andere Bedeutung als in Kanada

(ja) (also) *progressive means something completely different in the U.S. than in Canada*

In her German conversations as well Lauren does not only use lexical fillers, but quasi-lexical ones and lengthening of sounds, too, to fill hesitation pauses and

gaps. She uses lengthening sporadically, as shown in example (66) and she makes use of quasi-lexical fillers at the beginning and sometimes in the middle of a clause or a turn-constructional unit. The first case is illustrated in example (67), the latter in example (68).

(66) C7 LA54: mei=ne Güte

my= goodness

(67) C15 LA60: und e=h es geht nicht nur um <E language teaching E>

and. (e=h) it's not only about language teaching

(68) C7 LA31: und und dafür sind auch DIE die eh Gehälter nicht so sehr viel ho- höher

and and considering THE the (eh) *salaries are not so very much higher*

The quantitative and the qualitative analysis of Lauren's data regarding fillers demonstrates that her conversational style changes depending on the language she speaks, but not on the gender of the interaction partner with whom she speaks. When talking in German Lauren hesitates more often and utilizes more lexical fillers than when conversing in English. However, in her English conversations she uses more miscellaneous and more 'I mean' fillers than in her German conversations where she employs 'also' very frequently and almost exclusively, which gives her German conversations a unique character. The range of lexical fillers is almost the same in both languages.

When talking to a same-gender partner Lauren displays the same behavior regarding hesitation pauses as when she speaks to an opposite-gender partner.

4.5 June's filling of hesitation pauses

As a native speaker of English, June is neither a talkative nor a taciturn person. She uttered a total of 6,020 words in her four conversations. June is also one of the subjects that use fewer self-repairs including hesitation pauses. She employs an average of 313 self-repairs among which there are 227 filled hesitation pauses for 3,500 uttered words. Her conversational style can therefore be characterized as being rather taciturn and not prone to hesitations and other types of self-repair.

Table 4.4: June's filling of hesitation pauses

Fillers	**ES**	**EO**	**GS**	**GO**	**E**	**G**	χ^2	**S**	**O**	χ^2
Lexical	26	18	15	2	44	17	11.8*	40	21	6.2*
Miscellaneous	31	23	17	7	54	24	11.5*	48	30	4.2*
'I mean'	9	5	13	2	14	15	.09	22	7	7.8*
'You know'	6	5	0	0	10	0	10.1*	6	5	.1
Idiosyncratic	43	32	243	134	75	377	201.9*	286	166	31.7*
Quasi-lexical	40	55	35	90	95	125	4.2*	75	145	22.4*
Lengthening	43	32	243	134	75	377	201.9*	286	166	31.7*
Total	175	151	338	243	326	581	71.7*	512	395	15.3*

Legend: E = English, G = German, S = Same-gender partner, O = Opposite-gender partner. Data standardized for 3,500 words per conversation. All frequencies have been rounded to the nearest integer. χ^2 for $p \leq .05 \geq 3.84$ (1df). An asterisk indicates a significant chi-square value.

The quantitative representation of June's behavior regarding fillers is presented in Table 4.4. Her idiosyncratic filler is the lengthening of vowels and sound combinations.

In all her conversations June uses more quasi-lexical fillers than lexical fillers. She utilizes significantly more lexical fillers in her L1 than her L2, in which she employs significantly more quasi-lexical fillers and significantly more of her idiosyncratic filler. In fact, the lengthening of vowels and sound combinations is very frequent and dominant in her German conversations. It consists of more than three-quarters of all fillers combined. Conversely, in her English data there is no single filler used unusually often. Regarding the total number of fillers she also uses significantly more in her German conversations compared to her English ones.

June utilizes significantly more quasi-lexical fillers when talking to Werner as compared to when she is talking to Isabel. On the other hand, she uses more 'I mean' fillers, more of her idiosyncratic fillers, more lexical fillers as well as more fillers overall in her conversation with a same-gender partner compared to her behavior in the talk with an opposite-gender partner.

In all her conversations, June employs a variety of lexical fillers, which will be shown in a series of examples. That diversity, however, is greater in her native language. Finally, it is observed that she makes scarce use of 'you know' regardless of whether she speaks to Isabel or to Werner.

It has been stated that June uses a range of fillers. In her English data those include 'yeah,' 'okay,' 'well,' 'you know,' 'I mean,' 'I think' 'right?,' and others as demonstrated in the following examples taken from June's English conversations with Isabel (C6) and Werner (C9). June uses 'yeah' and 'okay' as fillers rather rarely. In examples (69) and (71) 'yeah' and 'okay' are used in a similar way as introductory fillers. 'Yeah' and 'okay' can be used at the beginning of a turn-

constructional unit as introductory fillers to create a link with what the interaction partner said or to signal agreement with what he or she said. 'Yeah' and 'okay' can also be employed in other positions, namely in the middle or at the end of a turn-constructional unit to stress what the speaker herself/himself said earlier. In June's data they occur either at the beginning or at the end of a clause or turn-constructional unit. The latter is shown in example (70).

(69) C9 JU77: yeah oh that's fun though [...]

(70) C9 JU58: we still have them yeah .. [...]

(71) C9 JU77: okay is that the Barn? [...]

'Well,' is another introductory filler used at the beginning of a clause or turn-constructional unit, as in the following example:

(72) C6 JU158: well then you should come to Calgary [...]

There is an interesting occurrence of three consecutive uses of 'well' in June's conversation with Isabel. It is shown as a brief exchange in example (73). It is noteworthy because we have seen something similar in Sue's conversation with Sven. However, June uses 'well' as a filler more frequently in her English conversations than Sue does.

(73) C6 JU59: WELL I've only taught twelve hours a week .. WELL which is more than I do here but I didn't have any WORK to do-

C6 IS8: because you had the materials [1 or I mean 1]

C6 JU63: [1 well I 1] had to PREPARE .. but uhm I wasn't taking any courses [...]

It has been said that 'you know' belongs to the class of lexical fillers that might be used either at the beginning, the end, or in the middle of a phrase, clause, turn-constructional unit, or turn. June does not use it often, but in all three positions. In example (74) she uses it at the beginning of a turn-constructional unit; in example (75) she uses it in the middle of a turn-constructional unit, and in example (76) 'you know' appears at the end of her turn-constructional unit.

(74) C9 JU11: you know I'd like to I'd like to go down and see the the Chinatown [...]

(75) C6 JU314: but actually I decided for you know the midterms in October [...] we should get everybody together [...]

(76) C6 JU307: that's good though you know .. [...]

'I mean' and similar expressions such as 'I think' and 'I believe' belong to the same class as 'you know.' June does not employ too many of these fillers, but again makes use of them in all three positions. In example (77) she uses 'I mean' at the beginning of a turn-constructional unit; in example (78) 'I think' appears at the beginning of a noun phrase, in the middle of a turn-constructional unit. Here, 'I think' most certainly appeals to the addressee's sympathy, because June herself knows exactly that the teaching causes her stress. However, the usage of this filler alters the utterance somewhat and engages Isabel, who in return could say the same about her teaching or just express sympathy and understanding. In example (79) 'I guess' occurs at the end of a short turn-constructional unit, which constitutes an answer to a question asked by Isabel. They are talking about noise or footsteps that come from the apartment above Isabel's suite, so June knows that the footsteps come

from above. Here the filler serves as a hedge that she might use out of politeness so as not to offend the non-native speaker Isabel who was not exactly sure how to express this circumstance in English. June does not want Isabel to feel incompetent or inferior.

(77) C9 JU80: right .. I mean their u=h one of their purposes there is to meet at the club [...]

(78) C6 JU22: but otherwise I think the .. TEACHING right now is causing me a HU=GE amount of stress ... (2.4) [...]

(79) C6 JU148: from above I guess ... [...]

June rarely uses 'so' as a filler, but when she does she does so in two different positions. In example (80) she utilizes it at the beginning of a turn-constructional unit and in example (81) 'so' turns up in a separate tone unit at the end of her turn-constructional unit.

(80) C6 JU73: s=o there wasn't that much pressure [...]

(81) C6 JU136: my mother is always home .. like after work .. so .. [...]

June employs the fillers 'right?' only once and she does it at the end of a turn-constructional unit as demonstrated in example (82). She talks to Isabel about canning and the filler does not express uncertainty, because June does not doubt the fact that canned foods last for years. She wants to keep the conversation flowing and engages Isabel through the usage of this filler.

(82) C6 JU89: and then they last for years right?

June also makes use of quasi-lexical fillers to fill her hesitation pauses. She utilizes most of them at the beginning of a turn-constructional unit, many in the

middle of a turn-constructional unit, and none at the end. In example (83) the quasi-lexical filler is used on its own at the beginning of a turn-constructional unit, and in example (84) it is used in combination with a repetition in the middle of a turn-constructional unit.

(83) C9 JU115: and uh then I come back completely exhausted [...]

(84) C9 JU51: and they brought uhm a a <G Dirndl G> [...]

Another feature that June uses to fill a hesitation pause or gap in her English conversations is the occasional lengthening of sounds as shown in example (85).

(85) C6 JU170: American Thanksgiving gives tha=nks to the=e pi=lgrims

In June's English conversations there were no combinations of lexical fillers observed.

June uses a smaller variety of fillers in her German conversations. Here they include lengthening of a vowel or sound combination, 'nee,' 'ich mein(e),' 'so,' and others as illustrated in the following examples taken from June's German conversations with Isabel (C5) and Werner (C10).

'Ja' is a typical introductory filler when used at the beginning of a turn-constructional unit. In the end or in the middle of a clause or turn-constructional unit it is often used to emphasize what the current speaker is saying. In June's German conversations there are extremely few occurrences of 'ja' as fillers. However, she uses something similar more often, namely 'nee.' When June uses 'nee' as a filler she never expresses negation, but rather affirmation, agreement or she stresses what has been said before. So she uses 'nee' the way 'ja' is usually used or also 'yeah' and

'okay' in English conversations. It has to be emphasized though that her intention is perfectly clear both to her interaction partners and to the researcher.

June uses 'ja' and 'nee' as a filler exclusively at the beginning of a turn-constructional unit, as can be seen in examples (86) through (88). The last example is similar to example (73) taken from one of June's English conversations where she uses three consecutive 'well' fillers in a brief exchange with Isabel. Here, June uses three consecutive 'nee' fillers in an exchange with Isabel. Isabel's utterances are not shown.

(86) C5 JU150: j=a (Hx) da bin ich [...]

(j=a) *here I am* [...]

(87) C10 JU99: mhm .. nee da wollte ich immer hin [...]

mhm .. (nee) I *always wanted to go there* [...]

(88) C5 JU181: ja .. nee das stimmt

yes .. (nee) *that's true*

C5 IS133: [...]

C5 JU182: nee das stimmt

(nee) *that's true*

C5 IS147: [...]

C5 JU183: nee stell dir vor ehm wenn man in Deutschland mit einem Job anfängt [...]

(nee) *imagine uhm in Germany when someone begins at a job* [...]

June uses very few 'ich mein(e)' filler, but she uses them in all three positions as can be seen in examples (89), (90), and (91). In example (89) she even uses two different fillers of this same type next to each other, namely 'ich mein' and 'ich glaub.'

(89) C5 JU31: ich mein ich glaub das ist wahrscheinlich überall das Gleiche [...]
(ich mein ich glaub) *that's probably the same everywhere* [...]

(90) C5 JU229: und Sprachgefühl ich mein das hab ich im Deutschen [...]
and a feeling for the language (ich mein) *I do have that in German* [...]

(91) C5 JU193: unseres [sic] sind auch bezahlt glaub ich
ours are paid too (glaub ich)

June rarely uses 'so' as a filler and she does so only at the beginning of a turn-constructional unit, as shown in example (92):

(92) C5 JU120: j=a s=o nä=chstes Jahr als Übersetzerin ... wahrscheinlich [...]
(ja) (so) *next year as a translator probably* [...]

In her German conversations June sometimes uses different lexical fillers in combination. Two have already been shown with 'ich mein ich glaub' in example (89) and 'ja so' in example (92), one more is illustrated below. 'Nee ich mein' in

example (93) shows the usage of two lexical fillers in a 'global planning zone' at the beginning of June's turn.

(93) C10 JU217: nee .. ich mein wenn ich von meinem Fenster aus guck- nach draussen gucke [...]

(nee .. ich mein) *when I look- look out my window* [...]

Like any other subject in this study, June also employs quasi-lexical fillers. Although, she uses quasi-lexical fillers in all three positions she mainly utilizes them at the beginning of a clause or turn-constructional unit. In example (94) 'ehm' occurs at the beginning of a turn-constructional unit and in combination with vowel lengthening. In example (95) June uses the quasi-lexical filler on its own at the end of a turn-constructional unit.

(94) C10 JU2: ehm .. da=s wei=ß ich nich=t ganz genau [...]

(ehm) *I do=n't kno=w tha=t so precisely* [...]

(95) C5 JU158: das find ich einfach cool .. ehm

I simply find that cool .. (ehm)

June's most prominent feature regarding fillers in her German conversations is the lengthening of a vowel or sound combination. These lengthenings occur in lexical or quasi-lexical items in any position of a clause or turn-constructional unit. It is thus the most flexible filler. June uses it most often in the initial position of a clause and/or turn-constructional unit and she frequently uses it in middle or end positions as well. Moreover, it is noteworthy that numerous turn-constructional units contain several lengthened vowels, as illustrated in examples (96), (97), and (98):

(96) C10 JU2: ehm .. da=s wei=ß ich ni=cht ganz genau [...]

uhm tha=t I do no=t kno=w exactly [...]

(97) C5 JU99: j=a e=h ihre Mu=tter kommt aus=s Ireland [...]

yea=h u=h her mo=ther is from=m Ireland [...]

(98) C10 JU17: obwo=hl wenn ich da= bi=n [...]

howe=ver when I a=m the=re [...]

The quantitative and the qualitative analysis of June's data regarding fillers reveals that her conversational style changes depending on the language she speaks and the gender of the interaction partner with whom she speaks. When talking German, June hesitates more often and utilizes both more lengthening and more quasi-lexical fillers compared to when she is speaking English. The variety of lexical fillers she uses in German is smaller than the range of lexical fillers she employs in her native language conversations. In addition, it has been observed that in her L2 conversations she utilizes lengthening more frequently than all other filler types combined, which gives her German conversations a personal style. When talking to a same-gender partner June hesitates more often, and uses lengthening and lexical fillers more often than in her conversations with an opposite-gender partner, where she uses more quasi-lexical fillers than in the conversations with Isabel.

4.6 Isabel's filling of hesitation pauses

The next participant's first language is German. Like Sue, Isabel is also among the more talkative of all the subjects in this study. She uttered a total of 8,521 words in her four talks and used little self-repair. In fact, with an average of 291 self-repairs among which there are 160 filled hesitation pauses for 3,500 uttered words

she is one of the participants who use the least self-repairs including fillers. Accordingly, her conversational style can roughly be described as being verbose but not prone to hesitations and other types of self-repair.

The quantitative representation of Isabel's behavior regarding fillers is given in Table 4.5. Her idiosyncratic filler is the English 'so.'

Table 4.5: Isabel's filling of hesitation pauses

Fillers	**ES**	**EO**	**GS**	**GO**	**E**	**G**	χ^2	**S**	**O**	χ^2
Lexical	100	149	86	76	249	162	18.4*	186	225	3.7
Miscellaneous	7	9	61	70	16	130	88.6*	68	79	.9
'I mean'	14	15	22	7	29	28	.01	36	21	3.7
'You know'	14	1	4	0	15	4	6.9*	18	1	14.5*
Idiosyncratic	65	124	0	0	189	0	188.8*	65	124	18.2*
Quasi-lexical	42	52	27	35	94	62	6.5*	70	87	1.9
Lengthening	21	15	18	18	36	36	0.0	39	33	.5
Total	164	215	131	129	379	260	22.1*	294	345	4.0*

Legend: E = English, G = German, S = Same-gender partner, O = Opposite-gender partner. Data standardized for 3,500 words per conversation. All frequencies have been rounded to the nearest integer. χ^2 for $p \leq .05 \geq 3.84$ (1 df). An asterisk indicates a significant chi-square value.

In all four conversations Isabel uses very few quasi-lexical fillers, and she utilizes more lexical fillers than quasi-lexical ones. It is apparent as well that she makes use of a different number of both quasi-lexical fillers and lexical fillers in all four conversations. She employs significantly more quasi-lexical fillers and lexical fillers in the English conversations compared to the German ones.

In all her conversations Isabel uses a variety of lexical fillers which will be shown afterward in a series of examples. Even though the range of lexical fillers is not larger in her L1 than her L2, in her English conversations she makes use of one specific filler, namely 'so,' more than twice as often than of all others combined. In her German data there is no single filler used unusually often.

Regarding the usage of quasi-lexical fillers and lexical fillers, there is no significant difference in Isabel's behavior whether she talks to a same-gender partner or to an opposite-gender partner. However, the total number of fillers is significantly larger when she speaks to an opposite-gender partner, and she also uses her preferred English filler 'so' more often, when talking to Gordon compared to when she is speaking to June.

Furthermore, it is noteworthy that she is the only participant in this study who uses a German equivalent for 'you know,' namely 'weißte' and 'weißt du,' and she makes use of 'you know' as a filler almost exclusively when talking to a woman.

It has been mentioned that Isabel uses a variety of fillers. In her English data those include 'yeah,' 'well,' 'you know,' 'I mean,' 'so,' and others as presented in the following examples taken from Isabel's English conversations with June (C6) and Gordon (C13).

In Isabel's speech when used as a filler 'yeah' often appears at the end of a clause or turn-constructional unit as shown in examples (99) and (100). However, it can appear in initial positions as well, particularly, in combination with other lexical fillers, which will be shown later in examples (112) and (113). Isabel also makes use of 'yeah' as a back-channeling device or she employs it at the beginning of an

utterance where it fulfills the double function of filler and signal of agreement for what her interaction partner has just said.

(99) C6 IS10: so that's different yeah-

(100) C6 IS57: (H) it was terrible (Hx) .. yeah [...]

Isabel uses 'well' very rarely, but like the other female participants, she typically uses it as an introductory filler at the beginning of a clause or turn-constructional unit, as in the following example:

(101) C6 IS181: yeah well they have uh sometimes they have that

Isabel uses 'you know' in all three positions. In example (102) she utilizes it at the beginning of a turn-constructional unit; in example (103) 'you know' appears in the middle of her turn-constructional unit, and in example (104) she makes use of it towards the end of a turn-constructional unit.

(102) C6 IS269: you know what what is in December what will happen there [...]

(103) C13 IS357: and also when they started to you know that when you had uh so people owned a house [...]

(104) C6 IS48: and al- and also because of the spiders you know spiders?

Like 'you know,' she employs 'I mean,' and similar expressions in all three positions, too. In example (105) Isabel uses 'I think' in the initial position; in example (106) she uses it at the end of a turn-constructional unit and in example (107) 'I think' appears in the middle of her turn-constructional units.

(105) C6 IS231: I think most of the holidays in Germany have the same function [...]

(106) C13 IS304: but young people are not that complicated anymore I think .. [...]

(107) C13 IS240: and they try that I think sometimes even more than the the people in the western part [...]

The filler that Isabel utilizes most frequently in her English conversations is 'so.' Like 'you know' or 'I mean' she employs it either at the beginning, the end, and sometimes in the middle of a clause or turn-constructional unit. Isabel occasionally uses more than one 'so' in one utterance as can be seen in examples (108) and (111). In the first one, she uses it twice at the beginning of a turn-constructional unit and in the latter she lengthens 'so' and uses it at the beginning as well as at the end of her turn-constructional unit. It is not unusual for Isabel to 'sandwich' her turn-constructional unit between two utterances of 'so.' An illustration of her usage of 'so' in the middle of a turn-constructional unit is shown in example (109) and of her usage at the end of a turn-constructional unit is given in example (110).

(108) C6 IS127: so so that's different [...]

(109) C13 IS5: a very small town so Borghausen

(110) C6 IS327: today I gave him the invitations so

(111) C13 IS14: s=o it's something in between s=o

It is also remarkable that Isabel sometimes uses different lexical fillers in combination such as 'so yeah I mean' in example (112) and 'yeah yeah so yeah' in examples (113). In both these examples 'yeah' is not used to confirm what or to

agree with what June had just said. Both examples contain 'yeah' and 'so.' In fact, no occurrence of a combination of lexical fillers without either 'yeah' or 'so' was found in Isabel's English data.

(112) C6 IS115: so yeah .. I mean it was closed but it wasn't locked so

(113) C6 IS238: yeah yeah so yeah that's-

Isabel fills her hesitation pauses mainly with lexical fillers, but she uses a small number of quasi-lexical fillers as well. Isabel rarely employs them at the beginning or at the end of a turn-constructional unit. In example (114) she uses the quasi-lexical filler in combination with repetitions in the middle of a turn-constructional unit.

(114) C13 IS165: but maybe it's it's uh a lot of traffic for you [...]

In example (115) three of Isabel's sporadic usages of lengthening of a vowel to fill a pause or gap can be seen. It is the beginning of her turn and she seems to do some verbal planning while starting her utterance, which explains the numerous lenthenings.

(115) C6 IS11: I wa=s alwa=ys ve=ry SCARED [...]

Isabel also uses a variety of lexical fillers in her German conversations. Here, they include 'ja,' 'also,' 'weißte,' 'ich mein(e),' 'so,' 'ja?,' and 'ne?' as illustrated in the following examples taken from Isabel's German conversations with June (C5) and Gordon (C14).

Isabel uses 'ja' not only to signal agreement with her interaction partners, but also as a filler. 'Ja' is one of those fillers that can occasionally be used in the middle of a turn-constructional unit. However, Isabel does not utilize it in the middle

position, but only as a linking device in initial positions, as shown in example (116) and for emphasizing purposes she employs it in final positions like the one in example (117).

(116) C14 IS6: ja wenn der Papst sagen würde [...]

(ja) *if the Pope would say* [...]

(117) C14 IS4: darf nicht sein ja

shouldn't be (ja)

'Also' is the lexical fillers that Isabel uses the most, although she doesn't use it as frequently as 'so' in her English conversation and it does not become as dominant. It is also a filler that can be used either at the beginning, the end, or in the middle of a clause or turn-constructional unit. Its preferred position, however, is at the beginning of a turn-constructional unit. Isabel makes use of it in all three positions, but she uses it most often at the beginning of a turn-constructional unit, as illustrated in example (118). Example (119) shows one of the rare usages of 'also' in the middle of Isabel's turn-constructional unit, and example (120) demonstrates her infrequent usage of 'also' in a separate tone unit at the end of a turn-constructional unit.

(118) C14 IS72: also sie bekommen das [...]

(also) *they get that* [...]

(119) C5 IS104: die haben die Meinung dass .. eh hier zum Beispiel also natürlich auch gearbeitet wird [...]

in their opinion .. uh for example (also) *one works here too of course* [...]

(120) C14 IS93: aber bei uns ist es relativ offen und und relativ frei .. also ..

but in our country it is relatively open-minded and relatively free-spirited (also)

Isabel is the only participant in this study who uses a German equivalent for 'you know.' She does it in two different ways when talking to June with 'weißte' and 'weißt du.' Example (121) illustrates the usage of 'weißt du' in a brief exchange between June and Isabel. 'Weißt du' takes up a whole turn and is still a filler used by Isabel to show her intention to hold the floor. Example (122) shows the typical usage of 'weißte?' at the end of a turn-constructional unit. It fulfills not only the role of fillers but also of a tag question. Isabel wants to make sure that she is getting her point across because she knows that June feels differently about this issue.

(121) C5 IS141: wa- was könnte passieren wenn

wha- what could happen if

C5 JU181: ja ... nee das stimmt

yes ... no that's true

C5 IS142: weißt du?

(weißt du?)

C5 JU182: ja

yes

(122) C5 IS125: dass also ... die Deutschen sie so ehm arbeiten und arbeiten und arbeiten weißte?

*that (*also*) the Germans they* (so) *uhm work and work and work* (weißte?)

Isabel also makes use of 'ich mein(e)'and similar German expressions to fill pauses or gaps. She uses them in all three positions. In example (123) she uses 'ich mein' at the beginning of a turn-constructional unit, in example (124) she uses 'glaub ich' in the middle of a turn-constructional unit and in example (125) 'denke ich' occurs at the end of Isabel's turn-constructional unit.

(123) C14 IS265: ich mein gut das ist der Kurs
(ich mein) *okay that is what the course is like*

(124) C5 IS167: und .. eh die Tendenz ist glaub ich auch da [...]
and .. uh the tendency is (glaub ich) *also present* [...]

(125) C14 IS4: u=nd es ist auch in bestimmten Berufsgruppen denke ich ... [...]
a=nd it exists in particular occupational groups (denke ich) [...]

In her German conversations, Isabel uses 'so' as a filler only occasionally, but she uses it in two different places. In example (126) she makes use of 'so' in a separate tone unit at the end of a turn-constructional unit and in example (127) she starts a turn-constructional unit with 'so.'

(126) C14 IS79: weil wir Geschenke kriegen .. so
because we get presents (so)

(127) C14 IS4: so mein Sohn und sein Freund die wollten uns eine Freude machen [...]

(so) *my son and his friend they wanted to do something nice for us* [...]

Isabel employs two different German fillers, 'ja?' and 'ne?' to engage her interaction partner at the end of a turn-constructional unit, as illustrated in examples (128) and (129):

(128) C14 IS234: wir haben 's auch gemacht nach Spanien ja?
we did it too went to Spain (ja?)

(129) C5 IS152: du musst ja jetzt au=ch .. schon ein bißchen an später denken ne?
now you also have to think a little about later (ne?)

In her German conversations as in the English ones, Isabel sometimes uses different lexical fillers in combination such as 'ja also' in example (130) and 'so also' in example (131). Her combinations always seem to include the filler 'also.'

(130) C5 IS193: ja a=ber j=a also das ist auch ein bißchen anders
yes but (j=a also) that is also a bit different

(131) C5 IS190: so also da ich ja weiss
(so also) *because* (ja) *I know*

Isabel also uses quasi-lexical fillers sporadically. She uses most of them in the middle of a turn-constructional unit, as shown in example (132) where the quasi-lexical fillers are used in combination with repetitions:

(132) C5 IS84: und ist sie auch aus eh eh aus Irland? [...]
and is she also from (eh eh) *from Irland?* [...]

Considering the lengthening of sounds as fillers it can be observed that Isabel manifests a similar behavior in all four conversations. She occasionally uses lengthening as shown in example (133):

(133) C14 IS4: und da=nn .. überleg ich mir .. will ich Ostern fünf Tage frei haben [...]

and the=n I ponder .. do I want five days off at Easter [...]

Regarding the usage of fillers, the quantitative and the qualitative analysis of Isabel's data demonstrates that her conversational style changes depending mainly on the language she speaks. When talking in English Isabel hesitates more often and utilizes both more lexical fillers and more quasi-lexical fillers. In addition, it has been observed that in her L2 conversations she uses the lexical filler 'so' more frequently than all other ones combined, which gives her English conversations a unique character. However, the variety of lexical fillers she employs in both languages is approximately the same. When talking to an opposite-gender partner Isabel does hesitate more often; however, she does not utilize more quasi-lexical fillers nor more lexical ones compared to when she speaks to a same-gender partner. And yet, she does use more 'so' fillers with Gordon than with June and she uses 'you know' more often when speaking to June. So her conversational style changes slightly depending on the gender of her interaction partner. It was also been noted that Isabel is the only subject who uses a German equivalent for 'you know.'

4.7 Gordon's filling of hesitation pauses

The first male to be discussed, a native speaker of English, is the second most talkative among the participants in this study. In his four conversations Gordon spoke a total of 11,290 words. He is also the subject who employs the most self-repairs including a lot of hesitation pauses. He uses an average of 536 self-repairs among which there are 317 filled hesitation pauses for 3,500 uttered words. Consequently, his conversational style can roughly be described as being verbose and prone to hesitations and other types of self-repair.

Table 4.6: Gordon's filling of hesitation pauses

Fillers	**ES**	**EO**	**GS**	**GO**	**E**	**G**	χ^2	**S**	**O**	χ^2
Lexical	34	38	58	69	72	127	15.5*	93	107	1.0
Miscellaneous	10	11	19	25	21	44	8.0*	29	37	.9
'I mean'	12	5	7	10	17	18	.01	19	15	.5
'You know'	12	21	0	0	33	0	33.4*	12	21	2.4
Idiosyncratic	0	0	32	33	0	66	65.5*	32	33	.03
Quasi-lexical	225	168	330	262	393	592	40.0*	555	430	15.8*
Lengthening	19	24	20	18	43	39	.3	39	43	.2
Total	279	230	408	350	508	758	49.1*	687	580	9.1*

Legend: E = English, G = German, S = Same-gender partner, O = Opposite-gender partner. Data standardized for 3,500 words per conversation. All frequencies have been rounded to the nearest integer. χ^2 for $p \leq .05 \geq 3.84$ (1df). An asterisk indicates a significant chi-square value.

The quantitative representation of Gordon's conversational behavior regarding the filling of hesitation pauses is introduced in Table 4.6. His idiosyncratic

filler is the German demonstrative 'da,' which he uses very often as demonstrative and just as often as a filler, too.

Gordon utilizes significantly more quasi-lexical fillers than lexical fillers in all his conversations. In his German conversations with Isabel and Sven he makes use of significantly more fillers than in his English conversations. Here, he also employs more lexical fillers, more quasi-lexical fillers and he has a particular filler, namely 'da,' that he uses very frequently. In his English data there is no single filler used exceptionally often.

Gordon makes use of a variety of lexical fillers in all his conversations. This will be illustrated later. It is apparent as well that he uses more quasi-lexical fillers in his interactions with Sven as compared to those with Isabel. In fact, he employs so many more quasi-lexical fillers that it affects the total amount of fillers used, which is therefore (and only therefore) significantly higher as well in his same-gender conversations as compared to the opposite-gender ones. Finally, it is observed that he makes use of 'you know' as a filler frequently, but not significantly more often when talking to a woman than when talking to a man.

It has already been said that Gordon makes use of a variety of fillers. In his English data those include 'yeah,' 'well,' 'you know,' 'I mean,' 'so,' and others as shown in the following examples taken from Gordon's English conversations with Sven (C3) and Isabel (C13).

Gordon uses 'yeah' as a filler either at the beginning or the end of a clause or turn-constructional unit. In example (134) 'yeah' does not only signal agreement with what has been said previously by his interaction partner, but serves as an

introductory filler as well. In example (135) 'yeah' used in a separate tone unit might fulfill the double function of filler and emphasis to what has been said previously.

(134) C3 GO258: yeah ..actually I know a lot of people [...]

(135) C3 GO7: it's much more fun to PARTicipate than to watch .. yea=h

Gordon infrequently employs 'well' as a filler, but as expected he does so exclusively in the initial position as shown in the following example:

(136) C3 GO330: well that's just an ordinary looking guy out there skating [...]

It has already been mentioned several times that 'you know' can be used in all three positions. Gordon rarely uses it in the initial position, more frequently in the middle position, and most often at the end of a turn-constructional unit. All three cases are illustrated in examples (137), (138), and (139):

(137) C13 GO81: you know what's in the book [...]

(138) C3 GO437: but these guys were real uh ... you know amazing people [...]

(139) C13 GO142: the rest of the laundromat is REALLY frightening ☺ you know ... [...]

'I mean' and similar expressions can also be used either at the beginning, the end, or in the middle of a clause or turn-constructional unit. In example (140) Gordon uses 'I mean' at the beginning of a turn-constructional unit; in example (141) 'I think' appears in the middle of his turn-constructional units and in example (142) he uses 'I mean' again this time at the end of a turn-constructional unit:

(140) C3 GO421: I mean they had a huge following [...]

(141) C3 GO149: when I was finishing my dissertation I think also when I did the uh the oral exams for Ph.D. for some weeks I quit doing stuff [...]

(142) C13 GO218: but uh at the same time I don't know how they sleep I mean

Gordon also uses the filler 'so.' He does it either at the beginning of a turn-constructional unit as shown in example (143) or at the end a turn-constructional unit as demonstrated in example (144). In the latter, 'so' appears in a separate tone unit and clearly engages the addressee who had been asked about politics by Gordon prior to this statement.

(143) C13 GO114: so that's different

(144) C13 GO269: I'm not that political myself .. so

It is also noteworthy that Gordon never uses different lexical fillers in combination like so many of the female subjects do. On the other hand, quasi-lexical fillers are employed very frequently by Gordon. In example (145) the first quasi-lexical filler is used on its own at the beginning of a turn-constructional unit and the second one is used on its own as well in the middle of a turn-constructional unit. There are no quasi-lexical fillers in Gordon's English data that appear in the end position.

(145) C13 GO110: uh in many many other cities like Vancouver for example to get a a reasonable uh place to live involves being way out [...]

Gordon sometimes also uses lengthening to fill a pause or gap. An example can be seen in (146):

(146) C3 GO51: a=nd uh every visitor could find something to do [...]

Gordon also uses a variety of lexical fillers in his German conversations. Here they include 'ja,' 'also,' 'ich mein(e),' 'so,' 'da,' 'ja?' etc. as shown in the following examples taken from Gordon's German conversations with Sven (C4) and Isabel (C14).

Gordon uses the filler 'ja' sometimes in initial position, more frequently at the end of a turn-constructional unit, but never in the middle. He also uses several 'ja' fillers in a single turn-constructional unit as shown in example (147). The first two create a link between what Sven had just said and what Gordon is about to acknowledge for himself as well. The last 'ja' emphasizes what he just said. By framing this utterance he creates a bond with Sven who does not think about going "there," to the theater, that is. So both men discover what they have in common. In this example the social function of fillers becomes quite obvious.

(147) C4 GO71: ja ja ich würde selbst nie daran denken dahin zu gehen
ja
(ja ja) *I myself would never think of going there* (ja)

'Also' is the lexical filler that Gordon uses the least in his German conversations. It is one that can be used either at the beginning, the end, or in the middle of a clause or turn-constructional unit and although Gordon seldom uses 'also' he makes use of it in all three positions, as can be seen in the following three examples. The last 'also' must not necessarily be regarded as being positioned at the

end of a turn-constructional unit. It can be claimed as well that it is part of a quotation and then stands in an initial position.

(148) C14 GO304: und also als Erwachsener und Jugendlicher bin ich immer so nur in Regina gewesen [...]
and (also) *as an adult and adolescent I was always* (so) *only in Regina* [...]

(149) C14 GO158: in einem Restaurant rauchen zu viele Leute besonders also auf auf der Uni da eh eh [...]
in a restaurant there are too many people smoking especially (also) *at at university* (da) *uh uh*

(150) C4 GO200: aber dann immer so wenn es mit Geschlecht zu tun hat o=h ja also wirklich
but always when it deals with sex o=h yeah (also) *really*

'Ich mein' and similar expressions also belong to the class of fillers that Gordon uses in all three positions. Gordon mainly uses 'ich finde.' In example (151) he uses it at the beginning of his turn-constructional unit; in example (152) he uses the same expression in the middle of a turn-constructional unit, and in example (153) he utilizes it at the end a turn-constructional unit.

(151) C14 GO78: ich finde es würde mich sehr überraschen das aus Deutschland zu hören [...]
(ich finde) *it would surprise me very much to hear that from Germany*

(152) C4 GO143: ja .. ja das ist auch anders finde ich .. viel eh eh viel anders als vor 25 Jahren

(ja .. ja) *that is different as well* (finde ich) *much uh uh much different than 25 years ago*

(153) C14 GO401: und eh so das überrascht auf angenehme Weise jedes Jahr finde ich

and uh that is a pleasant surprise every year (finde ich)

Gordon also uses 'so' as a filler. He repeatedly does it in the initial and middle position, but never at the end of a turn-constructional unit. Sometimes he uses more than one 'so' in a single turn-constructional unit as shown in example (154). The second 'so' does not necessarily have to be regarded as a filler, it could also be a particle meaning 'such prejudices.' In that case, however, he would have to specify what kind of prejudices he means, which he does not do in this or the next utterance even though Sven just gives Gordon feedback, and then yields the floor again.

(154) C4 GO42: und eh eh so wir hatten so Vorurteile

and uh uh (so) *we had* (so) *prejudices*

Gordon's most prominent feature regarding hesitation pause fillers in his German conversations is the usage of 'da.' He uses it most often in the middle position of a clause or turn-constructional unit, and he frequently uses it at the end but only seldom in initial positions. All three cases are shown in examples (155), (156), and (157). Sometimes Gordon uses more than one 'da' in one turn-constructional unit, as shown in example (156), where both 'da' fillers appear in the

middle of the turn-constructional unit and in example (157), where the first 'da' fillers occurs in the middle and the second one at the end of the turn-constructional unit. In example (156) the second 'da' could be regarded as a location adverb. However, the researcher claims that it is not an adverb otherwise Gordon would have to use 'hier,' (*here)* because he is talking about the same university at which he is at the time the conversation took place. In example (157) the two fillers 'da' can also be regarded as adverbs, but again the usage of 'hier' would be more appropriate because the conversation takes place in Edmonton.

(155) C4 GO36: u=nd wenn man da auch heute nur Radio und Fernsehen hat dann hat man vielleicht einen ähnlichen Eindruck [...]
and even if today one (da) *had only radio and television then maybe one might get the same impression* [...]

(156) C4 GO29: und wir wir beide eh da w-wir arbeiteten da an der Uni [...]
and we we both uh (da) w-we worked (da) *at the university* [...]

(157) C4 GO73: und eh ist auch interessant so= .. eh da in Edmonton in der Stadt in der Öffentlichkeit da [...]
and uh is also interesting (so=) *uh* (da) in Edmonton in *the city in public* [...]

Another filler that Gordon uses frequently in his German conversations is 'ja?'. Like all the other subjects he utilizes it at the end of a clause or turn-constructional unit to engage the addressee, as demonstrated in example (158):

(158) C14 GO73: das ist Unsinn ja?

that's nonsense (ja?)

In his German conversations, unlike in the English ones, Gordon sometimes uses different lexical fillers in combinations such as 'find ich da' in example (159) and 'find ich ja' in example (160).

(159) C14 GO136: aber man muss immer aufpassen find ich da

but one always has to pay attention (find ich da)

(160) C4 GO220: ja .. ja alle Großstädte sehen einander ähnlich aus find ich ja

yeah .. yeah all the big cities look alike (find ich ja)

Gordon also uses quasi-lexical fillers abundantly. In example (161) Gordon uses three consecutive 'eh' fillers combined with the lexical fillers 'so' at the beginning of a turn-constructional unit. In example (162) he uses the quasi-lexical fillers in different middle positions, one in combination with a repetition, another one on its own, and the last two combined with the lexical fillers 'so.' Finally, in example (163) we see one of those rare end-position quasi-lexical fillers.

(161) C4 GO56: und eh so eh eh man sieht den Fortschritt [...]

and (eh) (so) (eh eh) *one can see progress* [...]

(162) C14 GO219: und das hat eine eh eine merkbare Wirkung eh auf das Wetter so eh eh in in diesem ganzen Gebiet

and that has a (eh) *a noticeable influence* (eh) *on the weather (so)* (eh eh) *in in this whole region*

(163) C4 GO61: wenn man kein Hockeyfan ist dann ist man nichts und eh ..

if you are not a hockey fan then you are nothing at all and (eh) [...]

It can be observed that Gordon has a similar behavior in all four conversations with regard to the lengthening of vowels or sound combinations to fill hesitation pauses or other gaps. Like most subjects he occasionally uses lengthening as shown in example (164):

(164) C4 GO49: das war komisch wenn man so= ein gutes Restaurant finden wollte

that was funny if you (so=) *wanted to find a good restaurant*

In light of the quantitative and the qualitative analysis of Gordon's fillers, it is evident that his conversational style changes depending on the language he speaks and the gender of his interaction partner. When talking German, Gordon hesitates more often and utilizes both more lexical fillers and more non-lexical fillers. The variety of lexical fillers he uses in German is similar to the variety of lexical fillers he employs in his English conversations. In addition, it has been observed that in his L2 conversations he utilizes a particular lexical filler, namely 'da' more frequently than all other lexical fillers combined, which gives his German conversations a unique trait. When talking to a same-gender partner Gordon does hesitate more often

and uses more quasi-lexical fillers compared to when he speaks to an opposite-gender partner. It has also been noted that he uses 'you know' more often when conversing with a woman.

4.8 Henry's filling of hesitation pauses

Henry is a native speaker of English. His conversational style can be described as neither verbose nor taciturn, and as prone to hesitations and other types of self-repair. He is neither among the loquacious nor among the less talkative participants in this study as he uttered a total of 6,221 words in the four conversations he had. Moreover, he is the subject who uses the second most self-repairs, including a lot of fillers. He employs an average of 430 self-repairs among which there are 278 filled hesitation pauses and gaps for 3,500 uttered words.

The quantitative representation of Henry's behavior regarding the filling of hesitation pauses is shown in Table 4.7.

Henry employs significantly more quasi-lexical fillers than lexical fillers in all his conversations. In his German conversations with Lauren and Werner he uses significantly more fillers than in his English conversations. Here, he also utilizes more miscellaneous lexical fillers and more quasi-lexical fillers, but fewer 'I mean' fillers than in his English interactions. However, Henry does not make use of a particular lexical filler more frequently than any other one like so many subjects do in their non-native language. Henry does neither in German nor in English.

In all four conversations, Henry employs a variety of lexical fillers, which will be shown later. It is apparent as well that he hesitates more often and uses

significantly more quasi-lexical fillers in his interactions with Werner as compared to those with Lauren. However, he utilizes significantly more miscellaneous and slightly more 'you know' fillers when talking to a woman in comparison to when he is talking to a man.

Table 4.7: Henry's filling of hesitation pauses

Fillers	**ES**	**EO**	**GS**	**GO**	**E**	**G**	χ^2	**S**	**O**	χ^2
Lexical	37	30	25	53	67	77	.8	62	83	3.1
Miscellaneous	11	14	25	42	25	67	19.0*	36	56	4.6*
'I mean'	22	5	0	11	27	11	7.0*	22	16	.9
'You know'	4	11	0	0	15	0	14.9*	4	11	2.7
Idiosyncratic	0	0	0	0	0	0	.0	0	0	.0
Quasi-lexical	165	135	382	179	299	561	79.6*	547	313	63.5*
Lengthening	22	19	28	26	41	54	1.7	50	45	.2
Total	223	184	442	264	407	706	80.0*	666	448	42.8*

Legend: E = English, G = German, S = Same-gender partner, O = Opposite-gender partner. Data standardized for 3,500 words per conversation. All frequencies have been rounded to the nearest integer. χ^2 for $p \leq .05 \geq 3.84$ (1df). An asterisk indicates a significant chi-square value.

It has been remarked that Henry uses a variety of fillers. In his English data those include 'yeah,' 'well,' 'you know,' 'I mean,' 'so,' and others as illustrated in the following examples taken from Henry's English conversations with Werner (C2) and Lauren (C16).

Henry sporadically uses 'yeah' as a filler either at the beginning or the end of a clause or turn-constructional unit. In example (165) 'yeah' does not signal

agreement with what has been said previously by his interaction partner. It is used as a filler that emphasizes what Henry himself had said in a previous utterance. In example (166) 'yeah' might again fulfill the double function of fillers and emphasis to what has been said previously, but this time in the same utterance.

(165) C16 HE113: so this yeah this was his contribution to the to the work that has been done earlier [...]

(166) C16 HE12: I've been there yeah [...]

Henry employs 'well' infrequently, but as expected exclusively in the initial position as shown in the example (167).

(167) C2 HE154: well one does find that

The usage of 'well' by Henry has also been shown previously when an exchange with Lauren in example (41) illustrated how both subjects use 'well' several times in a row.

Henry also makes use of 'you know,' one of the fillers that can appear in all three positions. However, he never utilizes it in the final position. The following examples show how his usage of 'you know' in the initial and in the middle position:

(168) C16 HE130: you know the authorities they have their their ways of working [...]

(169) C16 HE126: and that's what made him feel you know bitter

Henry mostly uses expressions, such as 'I mean' and 'I think,' in the initial position, sometimes in the middle position, but again never in the final position. In example (170) he uses 'I mean' at the beginning of a turn-constructional unit and in example (171) 'I think' appears in the middle of his turn-constructional units:

(170) C16 HE105: I mean he was an outside examiner on a Ph.D. here

(171) C2 HE123: I sent the=m I think I sent them fifty dollars or something [...]

Henry also uses the fillers 'so.' He does it especially at the beginning of a turn-constructional unit as shown in example (172):

(172) C16 HE40: so= that's what we did

It is also noteworthy that in his English conversations Henry never uses different lexical fillers in combination like so many of the female subjects do.

Henry fills his hesitation pauses not only with lexical fillers, but with a lot of quasi-lexical fillers as well. Henry does not make use of quasi-lexical fillers in the end position. In example (173) the first quasi-lexical filler, which is part of a false start, is used on its own at the beginning of the turn-constructional unit and the second one is used on its own as well in the middle of the turn-constructional unit.

(173) C16 HE82: and uh he got- .. he found difficulty getting uh support for it [...]

Occasionally Henry makes use of lengthening as a filler as well. Example (174) illustrates the usage of several lengthened sounds in one utterance. These lengthenings seem to fulfill the double function of filler and emphasis.

(174) C2 HE9: I I always feel that lo=nger stays are more uhm beneficial in in a=ll wa=ys [...]

Henry also employs a range of lexical fillers in his German conversations. Here they include 'ja,' 'also,' 'ich mein(e),' 'nicht?' etc. as demonstrated in the

following examples taken from Henry's German conversations with Werner (C1) and Lauren (C15).

Henry utilizes the filler 'ja' sometimes in initial positions and sometimes in end positions, but never in the middle. Example (175) demonstrates the usage of 'ja' at the beginning of a turn-constructional unit, and example (176) shows its occurrence at the end of a turn-constructional unit.

(175) C1 HE32: ja als wir eh meine Frau und ich in Polen waren [...]
(ja) *when we uh my wife and I were in Poland* [...]

(176) C1 HE79: aber für für die Entwicklungsländer besonders ehm sie sind ehm ... davon abhängig geworden ja
but especially for for the developing countries uhm they have become uhm dependent on it (ja)

'Also' is the lexical filler that Henry uses the most in his German conversations, but he does not use it often enough to give his conversations a unique mark. Even though it is one of those filler types that can be used either at the beginning, the end, or in the middle of a clause or turn-constructional unit, Henry only uses it in initial and mid positions, as shown in the following two examples:

(177) C1 HE82: und e=h also die Psychologie de=s ... eh des Landes würde .. daran leiden [...]
and u=h (also) *the psychology of the= ...uh the country would suffer because of it* [...]

(178) C15 HE14: deswegen habe ich also Edmonton ausgewählt [...]
that's why I have (also) *chosen Edmonton* [...]

Henry mainly uses fillers of the 'ich mein(e)' type in initial and final positions. In example (179) it seems as though he were using 'ich glaub' in a middle position, but he starts over again with the filler so that it can be claimed that it appears at the beginning of his turn-constructional unit. In example (180) Henry utilizes 'finde ich' at the end a turn-constructional unit.

(179) C15 HE57: ja ja wir müssen eh ich glaub wir müssen warten nicht?
yeah yeah we have to uh (ich glaub) *we have to wait right?*

(180) C15 HE130: eh das ist auch- .. das hat keinen großen Wert finde ich
uh that is also- ..that doesn't make much sense (finde ich)

Henry uses a German filler that none of the other subjects use, namely 'nicht?'. He utilizes it the way most subjects use 'ja?' or 'ne?'. The latter one can be regarded as a short form for 'nicht?' Henry uses this filler exclusively with Lauren in middle and end positions, as illustrated in examples (181) and (182). In a way, this filler and how Henry employs it reminds the researcher of the English 'you know,' which he also uses more frequently with Lauren. It would make perfect sense to replace the 'nicht' in the English translation with 'you know.' Of course, it could also be replaced by 'right?,' but that is a filler that Henry does not use in this study. It is also noteworthy that both 'right?' and 'you know' often have the social function to engage the addressee, which 'nicht?' does as well in Henry's speech.

(181) C16 HE152: und eh er ist auch ganz begeistert nicht? für sein eh für sein Fach

and he is also very enthusiastic (nicht?) *about his uh about his subject*

(182) C16 HE100: ja ja eine solche Meinung herrschte vo=r zehn Jahren nicht?

yeah yeah such an opinion was common ten years ago (nicht?)

In his German conversations unlike in the English ones Henry sporadically uses different lexical fillers in combination such as 'ja also' as shown in example (193).

(183) C15 HE45: ja also um denen einen Gefallen zu tun [...]

(ja also) *to do a favor to those* [...]

Henry also uses quasi–lexical fillers abundantly. In his conversations no quasi-lexical fillers are found in the final position. In example (184) he uses two quasi-lexical fillers on their own at the beginning of a turn-constructional unit and two quasi-lexical fillers in combination with the lexical filler 'so' in middle positions. These two lexical fillers 'so' are the only ones encountered in Henry's German data.

(184) C1 HE41: denn eh sonst ehm hat man den leichten Eindruck, dass man so ehm beiderseits so eh ausgenutzt wird [...]

because (eh) *otherwise* (ehm) *you get the impression that* (so) (ehm) *both parties* (so) (eh) *are being* exploited [...]

Like most subjects, Henry demonstrates a similar behavior in all four conversations with regards to the lengthening of vowels or sound combinations. Sometimes he makes use of lengthening. An example is given in (185):

(185) C15 HE18: zwei Jahre später hatte ich dann ... einen ... Ma=gister [...]

two years later I then had ... a ... Ma=ster's [...]

The analysis of Henry's data reveals that his conversational style changes depending on the language he speaks and the gender of the interaction partner with whom he speaks. When talking in German Henry hesitates more often and utilizes both more miscellaneous lexical fillers and more non-lexical fillers. The variety of lexical fillers he uses in German is fairly similar to the variety of lexical fillers he employs in his English conversations. However, Henry does not make use of a particular lexical filler considerably more frequently than of other lexical fillers. When talking to a same-gender partner Henry does hesitate more often and uses more quasi-lexical fillers compared to when he speaks to an opposite-gender partner. It was also been noted that he uses significantly more miscellaneous lexical fillers and slightly more 'you know' fillers when conversing with a woman, and it has been observed that in his German conversation there is a filler, namely 'nicht?' that he utilizes exclusively with Lauren.

4.9 Werner's filling of hesitation pauses

Like Henry, Werner - a native speaker of German - is neither among the talkative nor among the taciturn participants in this study. 6,024 words were uttered

by him in all four conversations. Regarding the frequency of self-repairs used and hesitation pauses and gaps filled, he is somewhere in the middle as well compared to the eight other subjects. He employs an average of 323 self-repairs among which there are 229 fillers for 3,500 uttered words. Consequently, this study describes his conversational style as balanced, neither verbose nor quiet, and neither prone to nor not inclined to use fillers or other types of self-repair.

The quantitative representation of Werner's fillers of pauses and gaps is displayed in Table 4.8.

Table 4.8: Werner's filling of hesitation pauses

Fillers	**ES**	**EO**	**GS**	**GO**	**E**	**G**	χ^2	**S**	**O**	χ^2
Lexical	47	78	49	38	125	88	6.5*	96	116	1.8
Miscellaneous	26	47	49	36	74	85	.8	76	83	.3
'I mean'	15	8	0	3	22	3	15.4*	15	10	.8
'You know'	6	23	0	0	29	0	28.6*	6	23	9.9*
Idiosyncratic	0	0	0	0	0	0	.0	0	0	.0
Quasi-lexical	144	159	173	134	302	307	.03	317	293	.9
Lengthening	26	23	23	25	49	47	.03	49	47	.03
Total	217	259	245	197	476	442	1.3	462	456	.04

Legend: E = English, G = German, S = Same-gender partner, O = Opposite-gender partner. Data standardized for 3,500 words per conversation. All frequencies have been rounded to the nearest integer. χ^2 for $p \leq .05 \geq 3.84$ (1df). An asterisk indicates a significant chi-square value.

Werner uses significantly more quasi-lexical fillers than lexical fillers in all his conversations. He also uses different numbers of miscellaneous fillers, of 'I

mean' fillers, 'you know' fillers and therefore all lexical fillers and overall all fillers in his four conversations. These differences are mainly reflected in language differences. However, the differences in the usage of miscellaneous fillers and in all fillers do not translate into language or gender differences. In his English conversations with June and Henry he uses significantly more 'I mean' fillers and also more lexical fillers than in his German conversations. Like Henry, Werner does not use a particular lexical filler considerably more frequently than any other one, like so many subjects do in their non-native language. Werner does neither in German nor in English.

Werner uses a large variety of lexical fillers in all four conversations, which will be shown subsequently. Finally, it is observed that he makes use of 'you know' as a filler significantly more often when talking to a woman than when talking to a man.

It has been noted that Werner uses a variety of fillers. In his English data those include 'yeah,' 'well,' 'you know,' 'I mean,' 'so,' and others as illustrated in the following examples, which are taken from Werner's English conversations with Henry (C2) and June (C9).

Werner sporadically uses 'yeah' as a filler either at the beginning or at the end of a clause or turn-constructional unit. In example (186) the filler 'yeah' creates a link to what Werner had said in his previous utterance. In example (187) 'yeah' fulfills the double function of filler and emphasis to what Werner has just said in that same turn-constructional unit.

(186) C9 WE70: <u>yeah</u> then well people would go there let's say

Saturday morning [...]

(187) C2 WE45: which is a significant a significant percentage yeah [...]

The filler 'well' is the one that Werner uses most often, but not often enough to claim that it gives his English conversations a unique mark. 'Well' is typically used at the beginning of a clause and/or turn-constructional unit. Werner occasionally uses it in the middle of a turn-constructional unit, too, which is shown in example (188). An example of 'well' used in the initial position is given in (189).

(188) C9 WE130: uh it's a- so uh it always causes great uhm well agitation in the community [...]

(189) C2 WE37: well that will certainly require a lot of political will [...]

'You know' belongs to a class of lexical fillers that might be used either at the beginning, the end, or in the middle of a clause or turn-constructional unit. Werner uses it in all three positions but most frequently in the middle of a clause or turn-constructional unit. All three cases are illustrated in the following examples:

(190) C9 WE17: uhm you know there's China Town [...]

(191) C9 WE120: so there were you know a lot of little stores like this [...]

(192) C9 WE167: of course it takes GUTS to do that you know

Like 'you know,' 'I mean,' and similar expressions can be employed in all three positions. Werner sporadically uses these fillers in all three positions. In example (193) he uses 'I mean' at the beginning of a turn-constructional unit; in

example (194) 'I think' appears in the middle of his turn-constructional units and in example (195) 'I guess' is used at the end of a turn-constructional unit.

(193) C2 WE95: I mean it it works FINE [...]

(194) C9 WE35: but also u=h there is I think food as well [...]

(195) C9 WE83: it's just south two blocks south I guess [...]

There is one filler in Werner's English speech that was not observed in other subjects' conversations. It is 'whatever' and Werner employs it only once in the following utterance when he has to delay the production of the following lexical items:

(196) C2 WE96: unless there is a a particular agenda that you would like to see= uh carried forward such a=s .. whatever uh u=hm .. saving the environment

Werner also uses the filler 'so.' He does it especially at the beginning of a turn-constructional unit as shown in example (197):

(197) C9 WE57: s=o .. uhm a lot of people meet at Charly's meat market and so in the morning [...]

'Right?' is another filler that Werner uses occasionally. Like other participants in this study, he makes use of it at the end of a turn-constructional unit to engage the addressee, as shown in example (198):

(198) C9 WE57: you know where it is right?

It is also noteworthy that Werner sometimes uses different lexical fillers in combination as shown in example (199).

(199) C9 WE86: yeah WELL well a decent bakery [...]

Werner fills his hesitation pauses and gaps with a lot of quasi-lexical fillers as well. He does not make use of quasi-lexical fillers in the end position. In example (200) the first quasi-lexical filler is used on its own at the beginning of the turn-constructional unit, and the second one is used on its own as well in the middle of the turn-constructional unit.

(200) C2 WE5: uh and any country that cannot show two and a half or three percent growth is considered to be a uh country that is having economic difficulties

Example (201) shows two of Werner's occasional usages of the lengthening of sounds as fillers.

(201) C2 WE1: the en=tire LIFESTYLE is based on the idea that w=e MUST have growth [...]

Werner also uses a variety of lexical fillers in his German conversations. Here they include 'ja,' 'also,' 'ich mein(e),' 'ja?,' 'und/oder so' etc. as illustrated in the following examples taken from Werner's German conversations with Henry (C1) and June (C10).

Werner uses the filler 'ja' sometimes in initial positions and sometimes in end positions, but never in the middle. Example (202) demonstrates the usage of 'ja' at the beginning of a turn-constructional unit and example (203) shows its occurrence at the end of a turn-constructional unit.

(202) C10 WE40: eh ja ich muss sagen sie haben drüben auch alle Motorräder [...]

uh (ja) *I have to say over there they all have*

motorcycles as well [...]

(203) C1 WE78: oder ich verstehe nicht (ja)

or I don't understand (ja)

'Also' is the lexical filler that Werner uses the most in his German conversations, but he does not use it often enough to give his conversations a unique flavor. Although it is one of those filler types that can be used either at the beginning, the end, or in the middle of a clause or turn-constructional unit, Werner only uses it in initial and mid positions, as shown in the following examples:

(204) C10 WE84: also ich bin jetzt seit vielen Jahren weg [...]

(also) *I have been gone for many years now* [...]

(205) C10 WE32: wir haben immer Besuch bekommen also von Verwandten [...]

we always had visits (also) *from relatives*

An interesting usage of three consecutive 'also' fillers in three turn-constructional units in a row can also be observed in Werner's German data. Example (206) shows them.

(206) C1 WE49: eh .. also wir hatten- eh .. wir waren eh eigentlich 'ne kleine Gruppe das waren also Susanne und ich und eh ihre Schwester und ihr Mann eh also wir waren nur zu viert [...]

uh .. (also) *we had uh .. we were uh actually a small group there was* (also) *Susanne and I and eh her sister*

und her husband eh (also) *we were only a group of four* [...]

Werner seldom uses 'ich mein(e)' and similar expressions in his German data, but if he does, 'ich mein' appears in a middle position, as can be observed in example (207).

(207) C10 WE130: ich hab- ich war noch nie ich mein ich kenn die Gegend dort aber nicht sehr sehr gut eigentlich [...]
I have- I have never been (ich mein) *I do know that region but not very very well actually* [...]

A filler that Werner uses and that could not be observed in other subjects' German data is 'na.' He uses it on its own at the beginning of turn-constructional units or in combination with 'ja also' as will be shown later. Example (208) demonstrates the usage of 'na' without other fillers.

(208) C1 WE166: na und vor allem das Reisen gibt einem die Illusion der Freiheit [...]
(na) *and especially travelling gives you the illusion of freedom*

Like Gordon, Werner also uses 'da' as a filler, but does so less frequently than the former. Werner uses 'da' in middle and end positions. The following two examples demonstrate both cases. The first one contains two 'da' fillers in different middle positions.

(209) C10 WE71: obwo=hl es vielleicht da gar nicht so wichtig ist dass man da reist

even though it's maybe (da) *not at all that important that one* (da) *travels*

(210) C1 WE71: das mag ich nicht sehr da [...]

I don't like that so much (da) [...]

Werner also uses the fillers 'ja?'. Like other subjects he makes use of it at the end of a turn-constructional unit to engage the addressee, as can be seen in example (211).

(211) C1 WE36: ehm in der Kurzfassung und das reicht auch {☺} in vielerlei Hinsicht ☺ (ja?) ☺

uhm in the short version and that does it {☺}*in many respects* ☺ (ja?) ☺

Werner uses another German filler that none of the other subjects has used so far, namely 'und so' or 'oder so.' He uses them exclusively in his conversation with June. They appear at the end of a turn-constructional unit, as can be seen in the following two examples:

(212) C10 WE88: und da sind noch immer natürlich ein paar Erinnerungen und so [...]

and there are of course still a few memories (und so) [...]

(213) C10 WE140: das ist sehr schön und eh ein Motiv für eine Fotografie oder so

that's very beautiful and uh a motif for a photograph (oder so)

In his German conversations, like in the English ones, Werner sporadically uses different lexical fillers in combinations such as 'na ja also' or 'na ja' as shown in the following examples:

(214) C1 WE6: na ja also diese die Motivation habe ich eh eigentlich eh nicht [...]
(na ja also) *actually uh I don't have uh this- that motivation* [...]

(215) C10 WE103: na ja Madrid ist eh einfach ziemlich abgelegen [...]
(na ja) M*adrid uh simply is rather remote* [...]

Werner also employs quasi-lexical fillers abundantly in his German conversations. No quasi-lexical fillers are found in the final position in his data. In example (216) he uses several quasi-lexical fillers on their own, one at the beginning of a turn-constructional unit and four quasi-lexical fillers in different middle positions.

(216) C1 WE7: eh .. wir haben aber immer jemand wie .. Nicole eh die dann eh im Haus ist eh und sich dann darum kümmert, dass die Blumen nicht verdursten eh und so weiter [...]
(eh) *..but we always have someone like .. Nicole* (eh) *who is* (eh) *in our house then* (eh) *and takes care of the flowers* (eh) *and so forth* [...]

Like most subjects Werner sporadically uses lengthening. Example (217) illustrates such a case.

(217) C1 WE11: eh und eh das gibt mir eh eine gewi=sse Ru=he [...]

uh and uh that gives me uh certa=in assu=rance [...]

According to the findings of the quantitative and the qualitative analysis of Werner's fillers it can be claimed that his conversational style changes very little depending on the language he speaks and the gender of the interaction partner with whom he communicates. Werner does not hesitate more often when he speaks his non-native language English. However, he utilizes significantly more 'I mean' fillers and significantly more lexical fillers in his English conversations compared to his German ones. The variety of lexical fillers that he uses both in German and in English is very large. There are a few lexical fillers that he uses that have not been observed in the speech of other subjects. Yet, Werner does not make use of a particular lexical filler considerably more frequently than of other lexical fillers. When talking to an opposite-gender partner Werner does not hesitate more often than when talking to a same-gender partner. He does, however, use significantly more 'you know' fillers when conversing with a woman.

4.10 Sven's filling of hesitation pauses

Like Werner, Sven is also a native speaker of German who is neither among the talkative nor among the quiet participants in this study. The total number of words in all four conversations adds up to 6,965. He is the subject who uses the smallest number of self-repairs, including the fewest hesitation pauses. He employs an average of 255 self-repairs, among which there are 152 filled hesitation pauses for 3,500 uttered words. His conversational style can thus be described as neither verbose nor quiet. He is not inclined to hesitate or use other types of self-repair.

The quantitative representation of Sven's behavior regarding the filling of hesitation pauses is given in Table 4.9. His idiosyncratic filler is the literal 'I mean' in English but not similar expressions. Those are still found under the category 'I mean' filler. In his German conversations the idiosyncratic filler is 'ne?'.

Table 4.9: Sven's filling of hesitation pauses

Fillers	**ES**	**EO**	**GS**	**GO**	**E**	**G**	χ^2	**S**	**O**	χ^2
Lexical	75	80	100	76	155	176	1.4	175	156	1.1
Miscellaneous	8	20	38	27	28	64	14.3*	46	47	.01
'I mean'	28	15	34	23	43	57	1.9	63	38	6.4*
'You know'	2	3	0	0	5	0	4.5*	2	3	.06
Idiosyncratic	37	42	28	27	79	55	4.4*	64	69	.2
Quasi-lexical	71	47	16	47	118	64	16.5*	88	94	.3
Lengthening	24	25	25	21	49	45	.2	49	45	.1
Total	170	152	141	144	322	284	2.3	311	296	.4

Legend: E = English, G = German, S = Same-gender partner, O = Opposite-gender partner. Data standardized for 3,500 words per conversation. All frequencies have been rounded to the nearest integer. χ^2 for $p \leq .05 \geq 3.84$ (1df). An asterisk indicates a significant chi-square value.

Sven is the only male subject who does not use more quasi-lexical fillers than lexical fillers. In three conversations he uses more lexical fillers than quasi-lexical ones. In his English conversation with Gordon he uses roughly the same amount of lexical and quasi-lexical fillers. When speaking English, Sven uses more quasi-lexical fillers than when speaking German. On the other hand, he makes use of more miscellaneous lexical fillers when communicating in his L1 as compared to when he

is communicating in his L2. Sven also uses a particular lexical filler considerably more frequently than any other one, both in his English and in his German conversations. It is this 'I mean' and 'ne?'. However, he uses more idiosyncratic fillers in his English conversations compared to his German ones.

In Sven's data there are no differences in conversational style by gender. It seems as though he utilizes 'I mean' fillers significantly more often with Gordon than with Sue, but in fact this is not the case. Since he uses the literal 'I mean' as an idiosyncratic filler, these occurrences have to be added to the remainder of the 'I mean' category. He then uses 99 fillers of the 'I mean' category with Gordon and 80 with Sue, which does not represent a significant difference, the chi-square value being 2.1.

Like all eight participants in this study, Sven uses a variety of fillers. In his English data those include 'yeah,' 'well,' 'you know,' 'I mean,' 'so,' and others as illustrated in the following examples taken from Sven's English conversations with Gordon (C3) and Sue (C12).

Sven sporadically uses 'yeah' as a filler either at the beginning or at the end of a clause or turn-constructional unit. In example (218) the filler 'yeah' creates a link to what Sven had said in his previous utterance. In example (219) 'yeah' might fulfill the double function of filler and emphasis to what Sven has just said in that same turn-constructional unit.

(218) C3 SV119: a=nd <u>yeah</u> it was almost li=ke working two days on one day [...]

(219) C12 SV123: that's true <u>yeah</u> [...]

Sven uses the fillers 'well' not very often, but like Werner he utilizes it in two positions. 'Well' is typically used at the beginning of a clause or turn-constructional unit. Werner and Sven occasionally use it in the middle of a turn-constructional unit as well, which for Sven is shown in example (220). An example of 'well' used in the initial position is given in (221).

(220) C3 SV266: and then during recreation you just well put two bags on the floor and that's it

(221) C12 SV36: well this summer I was there for a conference

Sven uses 'you know' rarely and only in two positions. Example (222) shows how he uses it in the initial position while example (223) illustrates its usage in the middle of a turn-constructional unit.

(222) C3 SV264: but you know somebody just brought a little ball [...]

(223) C3 SV38: becau=se the sand gives you know to the jumping and so on [...]

Sven utilizes 'I mean' so often that it gives his conversations a unique mark. He also uses similar expressions 'I guess,' 'I think,' and 'I find' frequently. He uses most of them in the first position and some in the final position, but only rarely does he use them in the middle of a turn-constructional unit. In example (224) he uses 'I mean' at the beginning of a turn-constructional unit; in example (225) 'I think' appears in the middle of his turn-constructional units, and in example (226) 'I mean' is used at the end of a turn-constructional unit.

(224) C3 SV202: I mean that's really fun

(225) C12 SV80: I'm- it's I think basically names

(226) C12 SV21: I don't know why.. I mean

Sven also employs the filler 'so.' He does it at the beginning of a turn-constructional unit as shown in example (227) and in final positions as demonstrated in example (228)

(227) C12 SV109: so you started uh in Manitoba

(228) C12 SV76: but also they have some special words .. so

It is also noteworthy that Sven sometimes uses different lexical fillers in combination as shown in example (229).

(229) C3 SV209: and yeah I mean they earn a lot of money [...]

Like most of the participants in this study, Sven does not make use of quasi-lexical fillers in the end position. In example (230) the first quasi-lexical filler is used on its own at the beginning of the turn-constructional unit, and the second one is used with the lexical filler 'I think' in the middle of the turn-constructional unit.

(230) C3 SV116: and uh I always took a rather long lunch break of uh I think it was over two hours [...]

Sometimes Sven also uses lengthening as a filler. In example (231) he lengthens several sounds.

(231) C12 SV11: BUT when- this summer when I was at a conference i=n .. well not exactly in Bern but .. near Bern [...]

In his German conversations Sven employs a variety of lexical fillers, too. Here they include 'ja,' 'also,' 'ich mein(e),' 'ja?,' 'und/oder so' etc. as illustrated in the following examples taken from Sven's German conversations with Gordon (C4) and Sue (C11).

Sven sometimes uses the fillers 'ja.' He does it always at the beginning of a turn-constructional unit. Example (232) demonstrates this.

(232) C12 SV11: und weil .. ja solche Sachen sind oft ausverkauft und so [...]

and because .. (ja) such things are often sold out and such [...]

'Also' is a lexical filler that Sven uses very often in his German conversations. He employs it in all three positions, as can be seen in the following examples. He does, however, use it most frequently at the beginning of a turn-constructional unit.

(233) C4 SV9: also in der Stadt ist gar nichts gewesen [...]

(also) *in the city there was nothing at all* [...]

(234) C11 SV101: und der hat mir also genau gesagt also wann er was gemacht hat und so weiter

and he (also) told me exactly (also) when he did what and so on

(235) C11 SV98: bei mir geht's also

for me it's okay (also)

'Ich mein' is another filler that Sven utilizes in all three positions, but – like 'also' – most frequently in the initial position. All three cases are demonstrated in the following examples.

(236) C11 SV10: ich mein 's is okay

(ich mein) *it is okay*

(237) C4 SV14: die ersten Eindrücke die wir hatten ... warn ...glaub ich dass- [...] dass es hier 'ne Me=nge kultureller Sachen gibt [...]

the first impressions that we had .. were (glaub ich) *that-*[...] *that there is a lot of cultural stuff here* [...]

(238) C4 SV119: das ist unglaublich ich mein

that's unbelievable (ich mein)

The German filler that Sven uses most often is 'ne?'. He uses it exclusively at the end of a turn-constructional unit, as shown in example (239). He often uses it in turn-constructional units that he started with 'also,' as presented in example (240).

(239) C11 SV108: aber ich find halt nicht immer was ne?

but I do not always find something (ne?)

(240) C12 SV201: also .. so hab ich 's zumindest gehört ne?

(also) *..at least that's the way I heard it* (ne?)

Sven employs the same German filler that Werner uses, but none of the other subjects do, namely 'und so' or 'oder so.' Like Werner he uses them rather frequently and always at the end of a turn-constructional unit, as can be seen in the following two examples. In (241) Sven uses 'und so' three times in a row. This is another example of clustering of the same lexical fillers.

(241) C4 SV223: [...] hab ich mich auch mit .. ehm einem Professor von meiner Uni unterhalten und so .. der hat mir noch von seinen Erfahrungen berichtete und so .. er meinte es wär so toll in Nordamerika könnte man schon die

Dinge kaufen die man- die dann in Europa zwei Jahre später Trend werden und so [...]

I talked to uhm a professor from my university (und so) *.. and he told me about his experiences* (und so) *.. he said it would be so great in North America there you could already buy things that one- that then will become trendy in Europe two years later* (und so) [...]

(242) C11 SV53: und dann unterrichten das fünf Leute gleichzeitig oder so

and then five people teach that simultaneously (oder so)

In his German conversations, like in the English ones, Sven sporadically uses different lexical fillers in combination such as ' ja also' or 'und so ne?' as shown in the following examples.

(243) C4 SV51: u=nd .. ja also ich vermute dass das auch damit zusammenhängt wieviel Platz man einfach zum Leben hat ne? [...]

a=nd (ja also) *I reckon that this is also linked to the fact how much space you actually have to live right?* [...]

(244) C4 SV59: es ist wirklich ... klein u=nd möglichst praktisch und so ne?

it is really ... small a=nd as practical as possible (und so ne?)

Sven utilizes quasi-lexical fillers less often than most other subjects do. In Sven's conversation no quasi-lexical fillers are found in the final position. In example (245) he uses a quasi-lexical fillers on its own at the beginning of a turn-constructional unit, and in example (246) he uses another one on its own as well in a middle position.

(245) C11 SV92: aber eh 's ist nicht so leicht

but (eh) *it's not that easy*

(246) C4 SV130: ich glaub es hängt damit zusammen .. dass die Studenten einfach auch früher .. eh Geld haben wollen

I believe it's connected to the fact that students simply want to have (eh) *money earlier as well*

Sven also lengthens vowels or sound combinations. He does it like most of the participants in this study rather infrequently. Two occurrences in one utterance are presented in example (247):

(247) C12 SV11: j=a .. i=ch ich weiss es nicht [...]

yea=h I= I don't know [...]

The quantitative and the qualitative analysis of Sven's fillers indicates that his conversational style changes very little depending on the language he speaks and not at all depending on the gender of the interaction partner with whom he communicates. Sven does not hesitate more often when he speaks his non-native language English. However, he utilizes significantly more quasi-lexical fillers and

more idiosyncratic fillers in his English conversations compared to his German ones and more miscellaneous lexical fillers and overall more lexical fillers in his German speech compared to his English one. The range of lexical fillers that he uses is comparable in both languages. Also, Sven makes use of a particular English lexical filler, namely the literal 'I mean,' and of a particular German lexical fillers, namely 'ne?,' considerably more frequently than of other lexical fillers, which gives his conversations a unique character.

When talking to an opposite-gender partner Sven does not hesitate more often or use any kind of fillers significantly more often than when talking to a same-gender partner.

4.11 Comparison and summary

This part of the chapter describes the patterns observed for filling hesitation pauses and other gaps in English and German conversations with a same-gender partner and with an opposite gender partner. The participants used three different filler types: quasi-lexical fillers, lengthening of vowels or sound combinations and a variety of lexical fillers. All these fillers were used on their own or in various combinations with each other or with other self-repair types, such as repetitions or false starts.

Previous research (Shriberg, 1994) has shown that self-repair, in general, tends to occur in clusters. In particular, the same can be observed for fillers in certain positions. In so-called global planning areas – that is at the beginning of a turn – fillers often occur in combination. These combinations can consist of several quasi-

lexical fillers, several lengthenings of sound combinations, several lexical fillers or a combination of any two or of all three. A particular case of filler clustering has been observed for a number of subjects where the very same lexical filler is used several times in a row in one turn or in a brief exchange. In at least one instance it has also been observed that the interaction partner mirrors this behavior and uses the same lexical filler in her or his reactions to the speaker's utterances.

4.11.1 Effects of the language used in the conversations

For all eight participants it has been observed that their use of fillers changes depending on the language they speak, but for some of the subjects these changes are more evident than for others. With the exception of Werner and Sven, all participants hesitate significantly more often in their L2-conversations compared to their L1-conversations. Most of them use more quasi-lexical and more lexical fillers in their non-native language than in their native language. All participants use a variety of lexical fillers both in English and in German, but for some, namely Sue, June, and Lauren, this variety is greater in their first language than in their second language.

In addition, most participants – Sue, Isabel, June, Lauren, Gordon, and Sven – have developed a unique mark or conversational style in their non-native language by using a particular filler noticeably more often than others or even all other lexical fillers combined. Sven displays this behavior in his L2 as well as in his L1. Even though the particular fillers that each subject 'chose' are not the same, they belong to the same class of lexical fillers that can occur in any position, viz., at the beginning, in the middle of or at the end of turns, turn-constructional units, or clauses.

Exceptions to this rule are Sven's German filler 'ne?' and Sue's German filler 'ja?'. However, Sue uses two fillers very frequently, and the first one belongs to the more flexible class. It can therefore be claimed that in their non-native language six out of eight participants use a particular, very flexible filler unusually often. Apparently they have found a more elegant way than simply using 'uhs' and 'uhms' to deal with a high frequency of hesitation pauses.

Language-specific effects might be due to different repair strategies resulting from the language used, either English or German, or they might be due to different repair strategies resulting from the fact that the subject is speaking her or his L1 or L2, respectively. To distinguish between these two reasons, the language-specific effects are presented in two different tables. Table 4.10 shows the language effects based on L1 or L2 usage. Table 4.11 presents the language effects based on whether the language spoken is English or German. Whenever at least half the participants and at least twice as many subjects are found in one column than in the other column the researcher concludes to have found a strong trend.

In Table 4.10 four such trends are observed:

- Bilingual speakers tend to use more lexical fillers in their non-native language than in their native language;
- bilingual speakers tend to use a particular lexical filler, a so-called idiosyncratic filler, with unusually high frequency in their non-native language;
- bilingual speakers tend to use more quasi-lexical fillers in their non-native language than in their native language; and

- bilingual speakers, in general, tend to use more fillers in their non-native language than in their native language.

Table 4.10: Significantly higher frequencies of filler usage in conversations in L1 versus L2

Fillers	Native language	Non-native language
Lexical	June	**Sue, Lauren, Isabel, Gordon, Werner**
Miscellaneous	Lauren, June, Isabel, Sven	Sue, Gordon, Henry
'I mean'	Sue, Lauren, Henry	Werner
'You know'	Sue, June, Gordon, Henry	Isabel, Werner, Sven
Idiosyncratic		**Sue, Lauren, June, Isabel, Gordon, Sven**
Quasi-lexical		**Sue, June, Isabel, Gordon, Henry, Sven**
Total		**Sue, Lauren, June, Isabel, Gordon, Henry**

Legend: Subject names appearing indicate that this particular subject uses the feature in question with a very high frequency that is statistically significant for $p \leq .05$ (χ^2 for $p \leq .05 \geq 3.84$ (1df)). Subject names printed in bold indicate a 'strong trend'.

In Table 4.11 three trends are apparent:

- Bilingual speakers use more 'miscellaneous' fillers when speaking German than when speaking English;
- bilingual speakers use more 'I mean'-class fillers when speaking English than when speaking German; and
- bilingual speakers use more 'you know'-class fillers in English than in German.

Table 4.11: Significantly higher frequencies of filler usage in English conversations versus German conversations

Fillers	**English**	**German**
Lexical	June, Werner	Sue, Lauren, Isabel, Gordon,
Miscellaneous	Lauren, June,	**Sue, Gordon, Henry Isabel, Sven**
'I mean'	**Sue, Lauren, Henry, Werner**	
'You know'	**Sue, June, Gordon, Sven Henry Isabel, Werner,**	
Idiosyncratic	Isabel, Sven	Sue, Lauren, June, Gordon,
Quasi-lexical	Isabel, Sven	Sue, June, Gordon, Henry,
Total	Isabel	Sue, Lauren, June, Gordon, Henry

Legend: Subject names appearing indicate that this particular subject uses the feature in question with a very high frequency that is statistically significant for $p \leq .05$ (χ^2 for $p \leq .05 \geq 3.84$ (1df)). Subject names printed in bold indicate a 'strong trend'.

Table 4.11 could also suggest that - when speaking German - bilingual speakers use more lexical, more idiosyncratic, more quasi-lexical, and more fillers in general. However, by cross-comparing both tables it is apparent that those differences stem from the fact that more subjects in this study are native speakers of English than native speakers of German, and these differences are really linked to the usage of L2.

Van Hest, Poulisse, and Bongaerts (1997, p. 105) raise the question whether there is "a relationship between L2 proficiency level and self-repair." The findings of

this study suggest that with regard to fillers there does exist such a relationship. Even though all eight subjects are highly proficient in English and German, their level of proficiency varies. Werner, a native speaker of German who has lived in an English-speaking country for decades and has used both languages on a daily basis, is clearly the most proficient. Not only does he use approximately the same number of fillers in both languages, but he also displays very few differences in the usage of fillers when speaking his L2 compared to when speaking his L1. On the other hand, differences that are due to the language, either English or German, are respected by him as they are by most of the other subjects. It may well be that it is an indicator for accomplished second-language users if they are able to use conversational and communicative strategies in the same way in which native speakers do.

The results of this study thus suggest that fillers may be an appropriate tool for establishing the extent of a speaker's bilingualism. If second language users use approximately the same number of fillers in their L2 as they do in their L1, and if they use different filler types in the same way native speakers do, this could be another indicator of highly proficient bilinguals.

Taken together, the eight subjects use a range of lexical fillers, but that range is greater in the German conversations; for this reason, the subjects use 'miscellaneous' fillers more frequently in their German conversations. On the other hand, 'you know' is used more frequently in the English conversations compared to the German talks. Although there is a German translation for 'you know' (i.e., 'weißt du,' 'weißte') that can be used as a hesitation pause filler - and native speaker Isabel has demonstrated its usage - this German translation does not seem to be a functional

equivalent for 'you know.' That explains why that particular filler is used more frequently in the English conversations by all subjects. Lauren's use of 'you know' does not appear in Table 4.11 because she uses that particular filler extremely rarely. The same seems holds true for 'I mean' and similar expressions. German translations of these expressions do exist, and they are indeed used as fillers, but not all conversational situations which would require an 'I mean' filler in English also require an 'ich mein' filler in German. Consequently, 'I mean' is used more often in English conversations than in German.

4.11.2 Effects of the interaction partner's gender

For most of the eight participants it has been observed that their behavior regarding the filling of hesitation pauses changes slightly depending on the gender of their interaction partner. Only Lauren and Sven do not display any gender-specific pause-filling behavior.

The observed effects of the gender of the interaction partner might be due to two different reasons - either using different repair strategies when speaking to an opposite-gender partner compared to speaking with a same-gender partner, or using different repair strategies depending on whether the speaker is interacting with a woman or a man. To be able to distinguish between these two reasons, we present the effects in two different tables. Table 4.12 shows the gender effects based on whether the subjects speak to a same-gender partner or to an opposite-gender partner. Table 4.13 presents the gender effects observed when the participant speaks to a

woman or to a man. The same criteria were used to establish the existence of a strong trend as for Table 4.10.

Table 4.12: Significantly higher frequencies of filler usage in conversations with a same-gender partner compared to conversations with an opposite-gender partner

Fillers	**Talking to same-gender partner**	**Talking to opposite-gender partner**
Lexical	Sue, June	
Miscellaneous	June	Henry
'I mean'	Sue, June	
'You know'	Sue, Isabel	Werner
Idiosyncratic	June	Isabel
Quasi-lexical	Gordon, Henry	Sue, June
Total	June, Gordon, Henry	Isabel

Legend: Subject names appearing indicate that this particular subject uses the feature in question with a very high frequency that is statistically significant for $p \leq .05$ (χ^2 for $p \leq .05 \geq 3.84$ (1df)). Subject names printed in bold indicate a 'strong trend'.

In Table 4.12 no strong trend is evident. The effects of the gender of the interaction partner that can be observed, but are not generalizeable are as follows: Three participants – June, Gordon, and Henry – hesitate more often when speaking to a same-gender partner. Both male subjects use more quasi-lexical fillers to fill these pauses while June uses the lengthening of vowels or sound combinations to fill them.

Table 4.13: Significantly higher frequencies of filler usage in conversations with a woman compared to conversations with a man

Fillers	Talking to women	Talking to men
Lexical	Sue, June	
Miscellaneous	Henry, June	
'I mean'	Sue, June	
'You know'	**Sue, Isabel, Werner (Gordon, Henry)**	
Idiosyncratic	June	Isabel
Quasi-lexical		**Sue, June, Gordon, Henry**
Total	June	**Isabel, Gordon, Henry (Sue, Sven)**

Legend: Subject names appearing in brackets indicate that this particular subject uses the feature in question with a very high frequency that is statistically significant for $p \leq .10$ (χ^2 for $p \leq .10 \geq 2.71$ (1df)). Subject names not appearing in brackets indicate that this particular subject uses the feature in question with a higher frequency that is statistically significant for $p \leq .05$ (χ^2 for $p \leq .05 \geq 3.84$ (1df)). Subject names printed in bold indicate a 'strong trend'.

In Table 4.13 one trend is evident, and two more become visible if the data are included where differences approach standard significance levels. These trends are:

- Bilingual speakers use more quasi-lexical fillers when talking to a man than when talking to a woman;
- bilingual speakers use more fillers when talking to a man than when talking to a woman;
- bilingual speakers use more 'you know' fillers when talking to a woman than when talking to a man.

These trends suggest that self-repair strategies using fillers to fill hesitation pauses and gaps vary slightly based on the gender of the interaction partner. The difference is not so much related to a same-gender or different-gender interaction partner, but rather to the question whether the addressee is a man or a woman. More fillers seem to be used with men than with women, and more quasi-lexical fillers are used with men than with women. Of course, it must be kept in mind that this study is too small to permit such general claims, but the hypothesis can be advanced for an examination with more subjects and in different conversational situations.

The most obvious gender difference concerns the filler 'you know.' Five participants – namely Sue, Isabel, Werner, Gordon, and Henry – use it either significantly or considerably more often when talking to women as compared to when talking to men. The other three participants – June, Lauren, and Sven – use 'you know' so seldom that this trend is barely perceptible. When all 'you know' fillers encountered in this study are cumulated it becomes evident that 52 were addressed to women and 21 were addressed to men. This is a substantial difference that is worth further investigation.

Another trend was detected which involves the gender of the speaker. Three of four men use significantly more quasi-lexical fillers than lexical fillers or lengthening, whereas three out of four women use significantly more lexical fillers and lengthening than quasi-lexical fillers.

CHAPTER FIVE

SELF-REPAIR STRATEGIES: REPETITIONS AND FALSE STARTS

5.1 Introduction

This chapter investigates the strategies employed by the eight participants in this study when they repeat lexical items or when they have false starts in their utterances. The investigation concentrates on the ten most commonly used repetitions and false starts, namely

- repetitions of personal pronouns (RPE),
- repetitions of conjunctions (RC),
- false starts with pronouns and conjugated verb forms or verbal phrases (SPV),
- repetitions of pronouns and conjugated verb forms or verbal phrases (RPV),
- repetitions of prepositions (RP),
- repetitions of definite articles (RDA),
- repetitions of demonstrative pronouns (RDE),
- false starts with personal pronouns (SPE),
- repetitions of indefinite articles (RIA),
- false starts with conjunctions (SC).

To establish the most often used repetitions and false starts the raw data composing all sixteen conversations were used and all self-repair types were counted. It became apparent that fillers – which were analyzed in the previous

chapter – are the most common self-repair type, followed by immediate repetitions and false starts. The different types of repetitions and false starts were counted as well and the ten most frequently used were chosen for analysis. Table 5.1 presents these self-repair types and the frequency of their occurrence in the English and German conversations under investigation.

Table 5.1: The ten most common repetitions and false starts

Self-Repairs	**English**	**German**	χ^2	**Total**
RPE	178	107	17.7*	285
RC	111	119	.3	230
SPV	99	90	.4	189
RPV	119	52	26.3*	171
RP	95	69	4.1*	164
RDA	64	63	.01	127
RDE	23	62	17.9*	85
SPE	45	42	.1	87
RIA	40	44	.2	84
SC	39	40	.01	79
Total	813	688	10.4*	1501

Legend: An asterisk indicates a significant chi-square value (χ^2 for $p \leq .05 \geq 3.84$ (1df)).

The procedure employed in this chapter will be similar to the procedure in Chapter Four. For each of the subjects a quantitative and a qualitative analysis of

their usage of the ten most common repetitions and false starts will be undertaken. The analysis will reveal whether, and how, the language which they speak - English or German - and/or the gender of their addressee changes their self-repair strategies and thus their conversational style with respect to repetitions and false starts. The distinctive features of each person's strategies will then be contrasted with those of the other subjects in order to determine characteristics common to several subjects, to a group of subjects, or to conversational situations. In the final part of the chapter these results will be critically discussed.

Repetitions are self-repairs of types A and C in Fox and Jasperson's (1995) typology, viz., they constitute the immediate recycling of one or more identical lexical items. Here, the repaired segment and the repairing segment are exactly alike or partially alike. Between the first and the second (and sometimes third, fourth, or fifth) usage of an identical lexical item or identical lexical items pauses may occur, or quasi-lexical or lexical fillers as well as other lexical elements may be uttered.

False starts constitute the repaired segment of self-repairs of type B, D, E, F, and G in Fox and Jasperson's (1995) typology. A false start is usually followed by a cut-off and a restart or a fresh start. The restart or the fresh start can include some repeated elements and/or lexical or quasi-lexical fillers. A false start is produced

- when the speaker emits a slip of the tongue, or
- when the speaker has chosen a lexical item or construction that does not seem appropriate to herself or himself once uttered, or

- when the speaker recognizes that her or his production consists of a wrong grammatical form, or
- when the speaker changes her or his mind at the last minute about what to say, or
- when the speaker decides that the addressee needs some additional information before the statement that the speaker is about to make is in fact made. The initial statement might or might not be taken up later.

In the following, it will be shown how all eight participants use repetitions and false starts. Before the different repetitions and false starts which are used by the different subjects are presented and analyzed in a representative selection of examples, the different self-repair types will be discussed briefly with respect to their function and usage.

The repetition of personal pronouns (RPE) occurs significantly more often in the English corpus than in the German corpus. Its primary function is to gain additional time. Personal pronouns, such as 'I' or 'it,' and their German equivalents, are usually recycled without the use of any other elements, such as pauses, fillers, or other lexical items.

The repetition of conjunctions (RC), such as 'but' and 'and' as well as their German equivalents, happens frequently in both languages. It serves to delay the production of the next lexical item. Conjunctions are most often repeated without any other elements, but occasionally pauses, lengthening of sounds, quasi-lexical, and lexical fillers are uttered between the first and second usage of the conjunction.

False starts with pronoun-verb combinations (SPV) occur with comparable frequency in English and in German. Most false starts can serve a variety of functions, and this is the case for this type as well. The speaker pauses because of a slip of the tongue or of an uncertainty because s/he wants to correct an inappropriate or incorrect choice of words, because s/he wants to give additional information to the addressee, or because s/he needs to search for a word. False starts with pronoun-verb combinations are followed by a cut-off and a restart. The restart might, but does not have to, contain repetitions, quasi-lexical or lexical fillers, pauses, or a lengthening of sounds.

Repetitions of pronoun-verb combinations (RPV) are employed significantly more often in English than in German. They are also used in a different manner in the two languages. In the English data, they mostly consist of the repetition of pronouns and contracted verb forms. In the German language, however, there are no contracted forms of pronouns and verbs. Therefore this feature – which is used to 'play for time' – is used differently in English and German. What is similar nonetheless in both languages is the fact that pronoun-verb combinations are most often recycled without using any elements between the first and second mention of the combination. Occasionally, a pause, a lexical item, a quasi-lexical or a lexical filler is utilized between the repeated elements.

Repetitions of prepositions (RP) are also used significantly more often in the English conversations, but they are used in a similar manner in both languages and

serve the same purpose, namely, to delay the production of the next item or items. Prepositions are mostly repeated with no other self-repairs in between them, but occasionally a quasi-lexical filler is uttered between the first and second articulation of the preposition.

Definite articles are also frequently repeated when the speaker needs to do some verbal or cognitive planning. Like most structures, definite articles are mainly recycled on their own. However, lengthening, quasi-lexical or lexical fillers, or even other words are sometimes produced between the first and second, or third instance of the definite article. Every once in a while definite articles as well as indefinite articles and demonstratives are repeated twice.

Repetitions of demonstrative pronouns (RDE) occur significantly more frequently in the German data set than in English. Demonstrative pronouns are generally repeated without any other elements between the first and second use of the demonstrative. Seldom is a lexical item or a filler found between them.

False starts with personal pronouns (SPE) are very similar to false starts of pronoun-verb combinations in their function and in their usage.

False starts with conjunctions (SC) may differ from the other types of false starts. They often involve the conjunctions 'and,' 'or,' or 'but,' or their German equivalents. Speakers use them as placeholders, i.e., they articulate them in order to hold the floor when they have finished a turn-constructional unit. In this way, they signal to the addressee that 'it is not your turn yet.' At the same time, the speaker

plans her or his next turn-constructional unit which might require a different conjunction, for instance, a 'but' instead of an 'and.' Although most of the false starts of conjunctions are produced for this purpose, some are used for the same reason other false starts are.

5.2 Sue's repetitions and false starts

The quantitative representation of Sue's behavior regarding the ten most common repetitions and false starts is shown in Table 5.2. The table includes chi-square values (χ^2) to indicate statistically significant (or insignificant) differences between two frequencies. The qualitative analysis follows. It consists of the discussion and description of representative examples taken from Sue's four conversations.

After fillers, repetitions of personal pronouns (RPE) are Sue's most often used self-repairs. She employs these repetitions in her English and German conversations with a same-gender partner as well as with an opposite gender partner. She utilizes significantly more repetitions of personal pronouns in both English conversations. In examples (1) and (2) the immediate repetition of two English pronouns, 'I' and 'it,' is given.

(1) C8 SU11:[1] it's really strange I I don't know [...]

[1] Every example is preceded by a combination of letters and numbers. They indicate from which conversation the example is taken (C8 for conversation number eight); who is talking (here Sue is) and with which of the speaker's units the example starts of (here the example starts with Sue's 11th unit). As mentioned under section 3.4.3, every example is short because ethical issues hindered the inclusion of more context.

(2) C12 SU272: yeah <u>it it</u> was- as I said it wasn't really planned [...]

Table 5.2: Sue's repetitions and false starts

Self-repair	**ES**	**EO**	**GS**	**GO**	**E**	**G**	χ^2	**S**	**O**	χ^2
RPE	17	20	10	10	37	19	5.6*	26	30	.2
RC	6	11	16	8	17	23	.9	22	19	.2
SPV	5	6	10	5	11	15	.6	14	12	.3
RPV	5	10	5	4	15	9	1.4	10	15	1.0
RP	11	13	2	11	24	13	3.2	13	24	3.2
RDA	5	5	0	3	10	3	3.4	5	8	.9
RDE	8	2	7	10	10	17	1.5	16	12	.6
SPE	5	4	6	8	9	14	1.0	11	12	.03
RIA	2	0	16	9	2	24	17.9*	18	9	3.3
SC	4	7	0	10	11	10	.05	4	17	8.5*
Total	67	80	71	77	147	147	0.0	138	156	1.1

Legend: E = English, G = German, S = Same-gender partner, O = Opposite-gender partner. Data standardized for 3,500 words per conversation. All frequencies have been rounded to the nearest integer. χ^2 for $p \leq .05 \geq 3.84$ (1df). An asterisk indicates a significant chi-square value.

Examples (3) and (4) demonstrate that Sue repeats personal pronouns in a similar way in her German data. Here, the personal pronoun 'ich' is repeated immediately. Sporadically Sue uses a lexical filler, a quasi-lexical filler, or another lexical or quasi-lexical item between the repetitions of pronouns.

(3) C7 SU231: aber in Winnipeg <u>ich ich</u> hab- .. vielleicht waren eh

diesen- eh waren diese acht Monate eh nicht genug aber ich hab das Gefühl gehabt [...]

but in Winnipeg I I have- .. maybe these- uh these eight months were not long enough but I have had the feeling [...]

(4) C11 SU3: also ich mein dass das im Laufe des Tages dass ich ich ganz müde werde [...]

well I mean that in the course of the day that I I become very tired [...]

The third most common self-repair in Sue's data is the repetition of conjunctions (RC). She employs it frequently both in English and in German, often without other elements occurring between the first and second instance of the conjunction, which is illustrated in examples (5), (6), and (7). In example (8) Sue utilizes a quasi-lexical filler and a lexical filler between both 'und' conjunctions. She subsequently uses one more quasi-lexical filler and starts to repeat 'und' again, but stops herself. At this point, she seems to have found her train of thought, which is indicated by 'genau' uttered more to herself than to her addressee. Finally, she uses the introductory filler 'also' that frames the upcoming statement. This last example illustrates several delaying strategies employed in combination when the speaker is momentarily at a loss for words.

(5) C8 SU72: it's GREAT but but that one o'clock class I don't know

(6) C12 SU70: but uhm as time went by and and uh they could see that I had a fair command of things [...]

(7) C7 SU117: und eh e=h das war natürlich ehm dass dass jeder eh in der Schule Französisch lernen mußte [...]

and uh u=h it was clear uhm that that in school everyone uh had to learn French [...]

(8) C11 SU87: und eh ja und eh u=- genau also ich kann immer fragen [...]

and uh yeah and uh a=- exactly well I can always ask [...]

False starts with pronouns and conjugated verb forms or verbal phrases (SPV) are produced by Sue in all four conversations. She uses these false starts followed by a cut-off and a new start when she has chosen a verb or construction that does not seem appropriate (example (12) and maybe (9)), or consists of a wrong grammatical form (examples (10) and (11)), or thinks that the addressee needs additional information before the statement that she is about to make. Example (9) might illustrate such a case. Whenever the initial statement is not again taken up it is difficult to tell whether that has been the reason for the cut-off and new start.

(9) C18 SU332: I kno- I haven't heard enough Viennese to really make a statement about that [...]

(10) C12 SU322: I tried to make sure that I speak- that I spoke French

(11) C7 SU11: ich- eh also in meinem ersten Winter hab ich so- e=hm bin ich so rumgelaufen mit sehr DÜNNEN Handschuhen [...]

I- uh well in my first winter I have such- uhm I ran around with very thin gloves [...]

(12) C11 SU363: und eh sie gil- eh sie geben immer am Anfang IHRER Theorien eh eine kurze Zusammenfassung seiner .. [...]

and uh they (gil-) uh at the beginning of their theories they always state a summary of his [...]

Sue uses repetitions of pronouns and conjugated verb forms or verbal phrases (RPV) more often in her English conversations than in her German talk. In her English data they are mostly composed of pronouns and contracted verb forms, as shown in examples (13) and (14). There are similarities in Sue's way of using these repetitions in both languages. In English and in German she repeats them either with (examples (14) and (16)) or without (examples (13) and (15)) any elements occurring between the first and second usage of the PV.

(13) C8 SU67: teaching at one .. I have taught at one before .. tha=t it's it's TOO much in the middle of the day [...]

(14) C12 SU146: it's uh it's like Dutch [...]

(15) C7 SU216: dann ist das ist das nicht schwierig? [...]

then isn't that isn't that difficult? [...]

(16) C12 SU272: und im Moment ist das nun ist das natürlich kein Problem [...]

and right now that is well that is of course no problem [...]

Sue employs repetitions of prepositions (RP) in both languages, but does so more frequently in her English conversations. In both languages she almost exclusively repeats prepositions with no other lexical or quasi-lexical item between them. The first three of the following examples illustrate this. Example (17) is a noteworthy case of two repetitions of the same preposition. In example (20), Sue utilizes the quasi-lexical filler 'eh' between the first and second articulation of the German preposition 'mit.'

(17) C8 SU146: people with with with regular tenured jobs do teach that many students [...]

(18) C12 SU11: I think then you become immersed in in the language very quickly [...]

(19) C7 SU183: also bei bei uns ehm eh in der letzten Wahl das sieht man [...]

well in in our province uhm uh in the last elections one could see that [...]

(20) C11 SU126: ich verbringe wahrscheinlich keine fünfzehn Stunden

in der Woche mit eh mit diesem Unterricht und Vo-
mit der Vorbereitung und so weiter
probably I don't spend fifteen hours a week with uh
with this class and pre- with preparations and so on

Sue also repeats definite articles (RDA) more often in her English conversations. In fact, she does not use this strategy at all in the German conversation with Lauren. Sue mostly employs repetitions of definite articles with no lexical or quasi-lexical item interposed between them. Example (23) illustrates an exception. Here, she repeats the same article twice and uses a quasi-lexical element between the first and second utterance of 'die.'

(21) C8 SU100: I really haven't found that much of a difference between the the research years that I did and the writing years [...]

(22) C12 SU353: if I go to Montreal and you speak French with someone uhm then the the effort is appreciated

(23) C11 SU244: also wir zählen die eh die die <E sessionals E> und so weiter zählen nicht dazu [...]
well we don't count the uh the the sessional teachers
and so on don't count [...]

Repetitions of demonstrative pronouns (RDE) are employed more often in Sue's German conversations. Again this is a feature that she rarely uses with lexical

or quasi-lexical items between the first and second usage of the demonstrative pronoun. All following examples demonstrate this point.

(24) C8 SU245: so first of all that that works [...]

(25) C12 SU80: so that that was okay [...]

(26) C7 SU39: also das das finde ICH sehr schwierig [...]

well that that I find very difficult

(27) C11 SU272: und das das ist mir im ersten Jahr passiert [...]

and that that happened to me in the first year [...]

Sue also has false starts involving personal pronouns (SPE) in the two English and the two German conversations. Example (28) shows a particular case of two successive false starts preceded by the repetition of the personal pronoun 'I.' The other examples illustrate that Sue uses these false starts in a similar manner in both languages. The last three of the following examples show Sue's delayed wish to give the addressee more information before returning to her original turn-constructional unit.

(28) C8 SU264: well I I just- they just- she's already been there abou=t [...] three= three .. and a half whatever years before I arrived [...]

(29) C12 SU89: we- uh Stuttgart per se if the people were from the city I didn't have too many problems [...]

(30) C7 SU80: so aber er- als ich ihm eh als ich ihm erzählte [...]

so but he- when I told uh when I told him [...]

(31) C11 SU167: wenn man- eh eh also natürlich mit den Anfängern eh gibt's wirklich keine Frage [...] die ich nicht beantworten kann [...]

when you- uh uh well of course with the beginners uh there are really no questions [...] *that I can't answer* [...]

Sue rarely repeats indefinite articles (RIA) in her English conversations, but often does so in her German data. In German she often repeats indefinite articles twice, as shown in examples (33) and (34). Again, Sue does not use any items between the repeated articles, which can be seen in the English and German examples.

(32) C8 SU354: the imperative [...] should really have an an exclama- an exclamation mark at the end [...]

(33) C7 SU311: und sie meinte dass <E Newfoundland E> für ein ein ein Jahr ein ganzes Jahr sehr schön war [...]

and she said that Newfoundland was very nice for a a a year a whole year [...]

(34) C12 SU291: aber ich hab- mir fehlt ein ein ein besseres Wort [...]

but I have- I can't find a a a better word [...]

False starts of conjunctions (SC) are not found in Sue's German conversation with Lauren, but are present in all her other dialogues. The cut-off after this false start is often followed by a quasi-lexical filler which can be seen in example (37). False starts of conjunctions often involve the conjunctions 'and,' 'or,' or 'but' or their German equivalents. This is not only the case for Sue, as demonstrated in examples (35), (36), and (37), but for all participants in this study.

(35) C8 SU344: then- but she doesn't use any of the the vocabulary [...]

(36) C12 SU329: uhm but- and I I must say .. here being in Alberta .. it's totally different

(37) C11 SU5: und- eh aber wie ist dein Englisch? [...]

and- uh but how is your English? [...]

The presentation and discussion of these examples as well as the quantitative display of Sue's self-repair reveal few differences in the usage of these ten features. Statistically significant differences are observed for the usage of repetitions of personal pronouns, repetitions of indefinite articles, and for false starts with conjunctions. Sue repeats personal pronouns more often in her English conversations as compared to her German talk. In contrast, she repeats indefinite articles more frequently in her German dialogues compared to her English conversations. Finally, one difference linked to the gender of the addressee is noticeable. Sue produces more false starts with conjunctions when talking to a man as compared to when she is

talking to a woman. Sue's conversational strategies regarding the ten most often used repetitions and false starts thus change little with the language and the gender of the addressee.

5.3 Lauren's repetitions and false starts

The quantitative display of Lauren's usage of the ten most common repetitions and false starts is given in Table 5.3.

Table 5.3: Lauren's repetitions and false starts

Self-repair	**ES**	**EO**	**GS**	**GO**	**E**	**G**	χ^2	**S**	**O**	χ^2
RPE	30	39	37	40	70	77	.4	67	79	1.0
RC	22	4	34	24	25	58	13.1*	56	27	9.7*
SPV	13	18	13	20	31	33	.08	26	38	2.1
RPV	24	18	19	32	42	50	.8	42	50	.6
RP	9	0	24	8	9	32	13.2*	32	8	14.9*
RDA	15	4	13	36	19	49	13.5*	28	39	1.8
RDE	11	4	19	16	14	34	8.2*	29	20	2.0
SPE	0	0	11	8	0	19	18.5*	11	8	.4
RIA	2	11	0	8	13	8	1.2	2	19	12.9*
SC	0	4	0	0	4	0	3.6	0	4	3.6
Total	125	104	169	191	229	360	29.1*	294	294	0.0

Legend: E = English, G = German, S = Same-gender partner, O = Opposite-gender partner. Data standardized for 3,500 words per conversation. All frequencies have been rounded to the nearest integer. χ^2 for $p \leq .05 \geq 3.84$ (1df). An asterisk indicates a significant chi-square value.

The following qualitative analysis includes the discussion and description of representative examples chosen from Lauren's English and German conversations.

Next to quasi-lexical fillers and the German lexical filler 'also,' repetitions of personal pronouns (RPE) are Lauren's single most frequently used self-repair type. The frequent, rapid, immediate repetition of the pronoun 'I' or 'ich' that is almost never interrupted by any other lexical or quasi-lexical feature - as illustrated in the following four examples - might not be used as a strategy to delay the production of the next item(s); otherwise Lauren would not repeat the pronouns so quickly. She could instead employ this strategy to draw the addressee's attention to a particular statement. Example (38) shows an accumulation of strategies to stress the fact that Lauren cannot do what Sue had been talking about previously, namely continuously working seven days a week. She thus stresses the contrast between herself and her addressee Sue. Lauren uses the filler 'I mean,' which has a social and emphasizing function here; she stresses the word 'cannot' and repeats the pronoun 'I' several times, which could be an additional strategy to emphasize her position. It could also or additionally be a self-effacing feature so as to be more polite.

(38) C8 LA21: I I just I mean I CANNOT do that [...]

(39) C16 LA106: and I I went in there [...]

(40) C7 LA75: also ich ich hab noch nicht dort gelebt

well I I didn't live there yet

(41) C15 LA38: also ich ich kenn mich zwar aus aber ich bin kein

Spezialist

well I I know what's what but I'm not an expert

Repetitions of conjunctions (RC) are another type of Lauren's frequently employed self-repairs. She repeats conjunctions in both languages less quickly than personal pronouns, but also utilizes them mostly with no other item/s in between. Lauren reiterates conjunctions significantly more often in German and in same-gender conversations, but she uses them in a *similar* manner in both languages and in same-gender, and opposite-gender conversations, which is demonstrated in the four following examples.

(42) C8 LA78: uhm then I had all my data and and my analysis done THEN I started writing

(43) C16 LA57: and and they said .. no no can't let you do that [...]

(44) C7 LA155: und eh also wenn wenn ich die Chance hätte irgendwann mal nach Vancouver zu gehn ☺

and uh well if if I ever had the chance to go to Vancouver ☺

(45) C15 LA63: weil weil dieser Mensch einfach eh die Sprache unterrichten soll [...]

because because this person simply uh has to teach the language [...]

Lauren often produces false starts with pronouns and conjugated verb forms or verbal phrases (SPV) in all her conversations. In English, her false starts are often followed by repetitions as shown in examples (46) and (47). In German, this is less often the case. The German examples illustrate an instance – example (48) – where Lauren gives additional information to the addressee before getting back to her originally planned statement, and a case – example (49) – when she has to replace an inappropriate grammatical form with a correct one.

(46) C8 LA23: I'm- I I actually did get through a Master's program and a Ph.D. program without ever working on weekends ☺

(47) C16 LA6: n=o actually it wa=s- .. there's a there's a four month summer break at my home university [...]

(48) C7 LA272: ich war- eh ... wann war er denn das letzte Mal in Vancouver?

I was- uh ... when was the last time he was in Vancouver?

(49) C15 LA115: ja wir waren- wir haben erst um zehn nach angefangen

yeah we were- we've only started ten minutes after

Lauren employs repetitions of pronouns and conjugated verb forms or verbal phrases (RPV) very frequently in all her data. She is the only participant in this study who uses them more often – even if only slightly more often – in her German

conversations. In English, most of her repetitions of pronouns and conjugated verb forms or verbal phrases consist of pronouns and contracted verb forms, as shown in examples (50) and (51). Typically her repetitions of pronouns and conjugated verb forms or verbal phrases are not separated by quasi-lexical or lexical items, which is illustrated in the following four examples.

(50) C8 LA91: I'm I'm having a little bit of trouble getting enough research done [...]

(51) C16 LA272: that's that's- I I basically wanted- was more interested in what was going on NOW [...]

(52) C7 LA86: ich wollte ich wollte eigentlich schon immer hier leben

actually I wanted I always wanted to live here

(53) C15 LA101: ich hab ich hab in vielen verschiedenen Ortn gewohnt [...]

I have I have lived in many different places [...]

Lauren is the only subject who utilizes significantly more repetitions of prepositions (RP) in her German conversations. She also uses significantly more in her same-gender talk. The following three examples demonstrate that – qualitatively – Lauren's usage of repetitions of prepositions does not differ across languages or with the gender of the addressee. She almost exclusively repeats the same preposition with no lexical or quasi-lexical element between the first and second production of it. Both German examples are part of utterances that use several

strategies to delay the production of the next item/s, such as different repetitions, quasi-lexical and lexical fillers.

(54) C8 LA142: which- uh was this the equivalent of the German program in in Winnipeg?

(55) C7 LA136: und und also eh zum großen Teil sind das Leute mit mit denen ich wirklich eh inzwischen ziemlich gut befreundet bin

and and well uh those are mostly people with with whom I am really uh in the meantime quite good friends

(56) C15 LA64: und das ist das ist die Idee von von vielen aus den anderen <E divisions E> [...]

and that is that is the idea of of many people from the other divisions

Lauren employs significantly more repetitions of definite articles (RDA) in her German data compared to the English data. As is the case for the other repetition types, she rarely uses lexical or quasi-lexical items between the first and second articulation of the definite article. In example (57) she uses both a lexical and a quasi-lexical filler *before* repeating 'the.' Example (59) illustrates that the repetitions of 'die' must be a delaying strategy because it is quite obvious that Lauren has

trouble finding the correct word. The last example shows a variety of self-repair in which 'die' is repeated several times.

(57) C8 LA14: I mean uh the the way you said you work I just couldn't do it [...]

(58) C16 LA42: except that the the grant that I got [...]

(59) C7 LA117: i- i- ich ich hab mir die die Bewerbung die die Stellenanzeige angesehn
I I I have looked at the the application the the job ad

(60) C15 LA46: also die die die die ersten historischen Linguisten waren Deutsche
well the the the the first historical linguists were Germans

Lauren also utilizes significantly more repetitions of demonstrative pronouns (RDE) in her German conversations compared to the English talk. She sometimes repeats the same demonstrative twice, as shown in examples (61) and (63), and she never uses any features between the repeated pronouns, which becomes apparent from all four examples.

(61) C8 LA154: this this this Canadian he's from Toronto [...]

(62) C16 LA103: my only contact with this this kind of thing was at Heritage Days

(63) C7 LA152: das das das hat viel mit der Universität zu tun

that that that depends a lot on the university

(64) C15 LA107: also das das kenn ich nicht [...]

well that that I don't know

Lauren has no false starts with personal pronouns (SPE) in her English dialogues, but there are occurrences of false starts with personal pronouns in her German conversations. In example (65) and (66) it is shown how her cut-offs are often followed by the German filler 'also.' Lauren thus makes it easier for her addressees to recognize where her turn-constructional units restart.

(65) C7 LA83: mhm ich ich- also jeder spricht von Montreal [...]

mhm I I- well everybody speaks about Montreal [...]

(66) C15 LA20: ich- eh also so viele von meinen Kollegen haben jetzt gar keine Arbeit bekommen

I- uh well so many of my colleagues now haven't gotten a job at all

Lauren utilizes repetitions of indefinite articles (RIA) in English and German, but does not use any in her German same-gender conversation. She employs repetitions of indefinite articles differently in her English data compared to her German data. In English, Lauren repeats indefinite articles mainly as part of other repetitions, namely the repetition of pronouns and conjugated verb forms or verbal phrases, as shown in examples (67) and (68). In her German conversation with Sven,

however, she repeats indefinite articles on their own and without lexical or quasi-lexical features between them, which can be seen in example (69).

(67) C8 LA276: there is a there is a new faculty member who is 26 [...]

(68) C16 LA31: that's a that's a really good idea

(69) C15 LA36: wir brauchen auch einen einen Kollegen [...]

we also need a a colleague [...]

False starts with conjunctions (SC) are produced extremely rarely by Lauren; indeed, she only had four instances in one conversation, her English conversation with Henry. Example (70) shows how she abandons a turn-constructional unit to give Henry some additional information before returning to her initial plan which is signaled by the second 'but.' However, at that time she seems to have 'forgotten' what she originally planned to say, which is apparent because of her usage of a lengthened quasi-lexical filler. Finally she abandons her original plan and indicates with a 'yeah' that her point has been made, her turn completed.

(70) C16 LA272: so I I can't really compare but- .. as far as the weather goes but u=hm .. yeah

By analyzing Lauren's data it becomes apparent that with regard to the ten most frequent repetitions and false starts, her behavior changes frequently depending on the language she speaks and the gender of the interlocutor with whom she speaks. She employs significantly more of these ten self-repair strategies when speaking German. In particular, she produces more repetitions of conjunctions, more

repetitions of prepositions, more repetitions of definite articles, more repetitions of demonstrative pronouns, and more false starts with personal pronouns in her non-native language of German as compared to her native language of English. In addition, her usage of repetitions of indefinite articles is different in English than in German. She also uses significantly more repetitions of conjunctions and more repetitions of prepositions with a same-gender partner compared to an opposite-gender partner, and more repetitions of indefinite articles with an opposite-gender addressee than with a same-gender addressee.

5.4 June's repetitions and false starts

The quantitative exposition of June's use of the ten most common repetitions and false starts is presented in Table 5.4. In the following qualitative presentation and discussion representative examples taken from June's English and German conversations are analyzed.

June is the only participant in this study who employs very few repetitions of personal pronouns (RPE). She does not use repetitions of personal pronouns at all in her English data and in the German conversation with Isabel. Example (71) taken from her German conversation with Werner shows that in those rare instances when June does repeat a personal pronoun she does not utilize any lexical or non-lexical elements between the first and second articulation of the pronoun.

(71) C10 JU186: ehm <u>wir wir</u> verstehn uns schon [...]

uhm <u>we we</u> do understand each other [...]

Table 5.4 June's repetitions and false starts

Self-repair	ES	EO	GS	GO	E	G	χ^2	S	O	χ^2
RPE	0	0	0	7	0	7	7.3*	0	7	7.3*
RC	6	5	4	2	10	6	1.0	9	7	.3
SPV	13	0	11	2	13	13	.01	24	2	17.4*
RPV	9	5	4	5	14	9	1.2	13	10	.5
RP	4	0	6	2	4	8	1.6	9	2	3.9*
RDA	4	14	4	7	17	11	1.4	7	21	6.6*
RDE	0	0	4	2	0	6	6.1*	4	2	.3
SPE	2	28	0	2	29	2	22.8*	2	30	24.9*
RIA	4	0	0	0	4	0	3.6	4	0	3.6
SC	2	0	4	2	2	6	2.3	6	2	1.2
Total	42	50	35	34	92	69	3.3	77	84	.4

Legend: E = English, G = German, S = Same-gender partner, O = Opposite-gender partner. Data standardized for 3,500 words per conversation. All frequencies have been rounded to the nearest integer. χ^2 for $p \leq .05 \geq 3.84$ (1df). An asterisk indicates a significant chi-square value.

June repeats conjunctions (RC) in all four conversations. She does it in combination with lengthening, as seen in examples (72) and (74) with a quasi-lexical filler between the first and second articulation of the repetition, as shown in example (73), or with a pause between both conjunctions, which is shown in example (74). In

her last example June utilizes an immediate repetition of 'wenn' on its own, viz., with no other self-repair.

(72) C6 JU49: becau=se because I know he is looking out for our best interests [...]

(73) C9 JU108: but uh but it was the thought [...]

(74) C5 JU86: u=nd ... und die sind .. ich mein ... eh in der Realität sind die meine Generation [...]

a=nd ... and they are .. I mean ... uh in reality they are my generation [...]

(75) C10 JU129: wenn wenn Leute bei Sony oder- ... irgendwelche Probleme haben [...]

if if people at Sony or- ... have any kind of problems [...]

June has no false starts with pronouns and conjugated verb forms or verbal phrases (SPV) in her English conversation with Werner, but does so in her three other conversations. In fact, she produces significantly more false starts with pronouns and conjugated verb forms or verbal phrases with a same-gender partner than with an opposite-gender partner. The three following examples reveal that there are no differences by language in the way June produces false starts with pronouns and conjugated verb forms or verbal phrases.

(76) C6 JU11: it's- I feel like like everything is just compressing [...]

(77) C5 JU52: das das ist- .. da gibt's kein Dach [...]

that that is- .. there is no roof [...]

(78) C10 JU207: ja ja nee das liegt- die Stadt liegt im Norden [...]

yeah yeah no that's located- that city is located in the north [...]

Repetitions of pronouns and conjugated verb forms or verbal phrases (RPV) are used by June in all her conversations. She uses them with quasi-lexical fillers between both articulations, as shown in example (79), with a lexical item between the repetitions, which is illustrated in example (81), or on its own, as demonstrated in examples (80) and (82).

(79) C6 JU332: but- ... no I think uh I think some friends [...] will come down uh come up for the weekend

(80) C9 JU12: I'd like to I'd like to go down and see the the Chinatown [...]

(81) C5 JU175: das ist so das ist soviel HEKTischer [...]

that is so that is much more hectic [...]

(82) C10 JU144: aber das ist das ist so irgendwie 'nen Plan [...]

but that is that is somehow a plan [...]

Analogous to her production of false starts with pronouns and conjugated verb forms or verbal phrases and false starts with conjunctions, June also does not use repetitions of prepositions (RP) in her English conversation with Werner. She

employs repetitions of prepositions significantly more often with a same-gender addressee than with an opposite-gender addressee. When June repeats prepositions she does not employ any lexical or quasi-lexical elements between the first and second utterance of the preposition. All three following examples illustrate this.

(83) C6 JU137: when my parents go away on on vacation in the summer [...]

(84) C5 JU40: ne=e Häuser mit mit Gras da oben ... mit Gras oben drauf?

no= houses with with grass up there ... with grass on top?

(85) C10 JU129: wenn wenn Leute bei Sony oder- ... irgendwelche Probleme haben dann rufen die bei- in in Waldorf an [...]

if if people at Sony or- ... have any kind of problems then they give a call at- in in Waldorf [...]

June makes use of repetitions of definite articles (RDA) in all her conversations. She often uses these repetitions in combination with the lengthening of one or both of the definite articles, as can be seen in examples (87) and (88). June does not use any lexical or quasi-lexical elements between the first and second articulation of the article, which can be seen in all of the following four examples. Example (88) is particularly interesting because here June utilizes repetitions of

definite articles twice in the same turn-constructional unit but for two different noun phrases. In example (89) it is quite obvious that these repetitions serve as a delaying strategy. The additional time does not allow June to find an appropriate German noun, and so she chooses a different approach, namely code-switching. The same can be observed for Sue's behavior in example (23).

(86) C6 JU4: the the crazy thing is that I don't believe in stress [...]

(87) C9 JU67: but uh one of my friends [...] uhm he now wears th=e th=e what- the jackets what are they typically called? [...]

(88) C5 JU300: und di=e die Frauen haben dann immer so 'nen weißes Ding drauf und die die Mädchen auch [...]
and th=e the women always have such a white thing on it and the the girls as well [...]

(89) C10 JU96: a=ber immerhin das das <E travel book E> hatten wir immer als Kinder [...]
bu=t after all as kids we always had the the travel book [...]

June employs repetitions of demonstrative pronouns (RDE) rarely and exclusively in her German talk. In example (90) she repeats 'das' on its own as part of what is most probably a delaying strategy, whereas in example (91) she recycles

'das' because she has to restart and chooses to do so with the demonstrative. She could also restart with the negation particle 'keine' or with the conjunction 'obwohl.'

(90) C5 JU23: das das würd vielleicht dazu passen [...]

that that might go well with it [...]

(91) C10 JU193: ehm obwohl das nicht- das keine sehr große Rolle spielt [...]

uhm although that not- that doesn't play a big role [...]

Most of June's false starts with personal pronouns (SPE) occur in her English data with her opposite-gender partner. The following three examples illustrate how June abandons original turn-constructional units either to give her utterance a different turn, which could be the case for example (94), or to give the addressee more information, which is most probably the case for examples (92) and (93).

(92) C6 JU245: we- I went on [...]

(93) C9 JU8: it- uh there was a an open area [...]

(94) C16 JU272: a=ber .. es- ich gebe immer klei=ne Hinweise immer [...]

bu=t .. it- I always give little hints [...]

June utilizes repetitions of indefinite articles (RIA) very rarely and only in her English conversation with Isabel. Example (95) shows that she uses quasi-lexical fillers and a pause between the first and second articulation of 'a.'

(95) C6 JU211: they were doing a uh uh ... a sort of mor- not moral

stuff but social issues [...]

It has already been mentioned that June produces no false starts with conjunctions (SC) in her English conversation with Werner. In the other three conversations she employs false starts with conjunctions occasionally. These always involve 'but,' 'and,' or 'or' or their German equivalents, which can be seen in the following examples.

(96) C6 JU332: but- ... no I think uh I think some friends [...] will come down uh come up for the weekend [...]

(97) C5 JU113: ja .. NEE der Paß kostet nur ... (3.5) zweihundert ... und- oder nee hundert [...]

yes .. NO the passport costs only ... (3.5) two-hundred ... and- or no one-hundred [...]

(98) C10 JU272: wenn wenn Leute bei Sony oder- ... irgendwelche Probleme haben dann rufen die bei- in in Waldorf an [...]

if if people at Sony or- ... have any kind of problems then they give a call at- in in Waldorf [...]

June's behavior with respect to the ten most commonly used repetitions and false starts changes depending on the language and particularly on the gender of her interaction partner. She employs significantly more repetitions of personal pronouns and more repetitions of demonstrative pronouns in German than in English, as well

as significantly more false starts with personal pronouns in English than in German. She also produces significantly more repetitions of personal pronouns, more repetitions of definite articles, and more false starts with personal pronouns with an opposite-gender addressee than with a same-gender addressee. In addition, she produces significantly more false starts with pronouns and conjugated verb forms or verbal phrases and repetitions of prepositions with a same-gender partner than with an opposite-gender partner.

5.5 Isabel's repetitions and false starts

Table 5.5 offers the quantitative representation of Isabel's usage of the ten most frequently used repetitions and false starts. The qualitative review of her behavior follows with an analysis of representative examples from her four conversations.

Isabel frequently employs repetitions of personal pronouns (RPE) in both languages, but significantly more often in her English data. Many times she repeats the pronouns with no quasi-lexical or lexical element between the first and second utterance of the personal pronoun. This is demonstrated in examples (99), (100), and (102). Example (101) shows how Isabel repeats 'du' as part of a combination of repeated conjunction and personal pronoun. The first 'du' is also lengthened.

(99) C6 IS107: so I I let the door open [...]

(100) C13 IS107: they hardly speak German anymore so they they speak

English now [...]

(101) C5 IS220: wenn d=u wenn du Leute brauchst mit denen du täglich zu tun hast ne? [...]

if yo=u if you need people to be in contact with every day right? [...]

(102) C14 IS199: wir wir werden nicht nach Kentucky gehen [...]

we we won't go to Kentucky [...]

Table 5.5: Isabel's repetitions and false starts

Self-repair	**ES**	**EO**	**GS**	**GO**	**E**	**G**	χ^2	**S**	**O**	χ^2
RPE	23	21	4	17	44	21	8.7*	27	38	1.9
RC	19	9	18	20	29	38	1.2	37	29	.9
SPV	19	8	16	22	27	37	1.5	35	30	.5
RPV	14	19	4	2	33	6	19.2*	18	20	.1
RP	19	13	2	3	33	5	19.8*	21	17	.6
RDA	11	8	2	13	19	15	.3	13	21	2.2
RDE	0	0	6	15	0	21	20.8*	6	15	3.9*
SPE	2	8	2	2	10	4	2.8	4	10	2.6
RIA	2	1	2	0	3	2	.2	4	1	1.2
SC	2	3	6	5	5	11	2.7	8	8	0.0
Total	115	91	61	98	205	159	5.9*	176	189	.5

Legend: E = English, G = German, S = Same-gender partner, O = Opposite-gender partner. Data standardized for 3,500 words per conversation. All frequencies have been rounded to the nearest integer. χ^2 for $p \leq .05 \geq 3.84$ (1df). An asterisk indicates a significant chi-square value.

Isabel also repeats conjunctions (RC) frequently and in all her conversations. She does this almost exclusively on its own with no features inserted between the first and second articulation of the conjunction as shown in the following four examples.

(103) C6 IS167: and and it's it's religious a religious uhm celebration

(104) C13 IS106: but but I found out that they hardly speak German anymore [...]

(105) C5 IS71: dann dann reicht es es halt [...]
then then it it is just enough [...]

(106) C14 IS120: ja .. aber aber für Kinder ich find das wirklich [...]
yeah .. but but for kids I really do find that [...]

False starts with pronouns and conjugated verb forms or verbal phrases (SPV) is another self-repair type often employed by Isabel in all four conversations. Example (109) is a special and rare token of this self-repair type. Here, the false start occurs with a combination of a noun phrase and a conjugated verb form instead of a pronoun and a conjugated verb form or verbal phrase. In example (107) Isabel utilizes an introductory lexical filler after her cut-off to start and mark the new beginning of her turn-constructional unit. Example (108) demonstrates how the search for an appropriate word leads to a false start and cut-off, and example (110) illustrates how Isabel gives her utterance a new turn by restarting after the false start and cut-off.

(107) C6 IS90: because it was- you know it reminded me of the of the people in there [...]

(108) C13 IS48: and they build in in the areas where they had- where the fresh air was coming in [...]

(109) C5 IS149: also Freunde von mir ha=ben- eh eine Freundin die hat jetzt erst angefangen [...]

well friends of mine have- uh a female friend she has just started now [...]

(110) C14 IS94: ja ja das ist- oder die Nachbarn gucken auf die Nachbarn [...]

yeah yeah that is- or the neighbors look at the neighbors [...]

Isabel utilizes repetitions of pronouns and conjugated verb forms or verbal phrases (RPV) in all four conversations as well. However, she employs them significantly more often in her English conversations than in her German talk. In examples (111) and (114) Isabel uses a lexical item between the first and the second pronoun-verb-combination whereas examples (112) and (113) illustrate cases in which no lexical or quasi-lexical items are used between the pronoun-verb-combinations.

(111) C6 IS62: I I began to sometimes I began to run

(112) C13 IS65: and he said okay it was it was okay [...]

(113) C5 IS79: warst du warst du schon mal in Irland? [...]

have you have you ever been to Ireland? [...]

(114) C14 IS150: ja ja das ist natürlich das ist in Deutschland so [...]

yeah yeah it is of course it is like that in Germany [...]

Repetitions of prepositions (RP) are also employed significantly more often in Isabel's English data than in her German data. Three examples – (115), (116), and (118) – illustrate how Isabel repeats the prepositions on their own, which is the manner she usually and regularly recycles prepositions. Example (117) shows one of the rare occurrences of a repetition of prepositions that has quasi-lexical fillers between the first and second usage of the preposition.

(115) C6 IS166: we thank for for the harvest

(116) C13 IS48: and they build in in the areas where they had- where the fresh air was coming in [...]

(117) C5 IS84: und ist sie auch aus eh eh aus Irland? [...]

and is she also from uh uh from Ireland? [...]

(118) C14 IS315: ja das Gefühl hab ich ganz doll bei bei einigen [...]

yeah I have that feeling rather strongly with with some [...]

Repetitions of definite articles (RDA) are another feature employed by Isabel in all four conversations. She mostly repeats definite articles on their own, as demonstrated in the first repetition of example (119) and in examples (120), (121),

and (122). The second repetition of definite articles in example (119) is part of a prepositional phrase in which the definite article and the preposition are repeated.

(119) C6 IS198: do you know something about the the ideas they had of the of the world of the gods there?

(120) C13 IS272: the the students they have two months [...]

(121) C5 IS254: also die die Leute die wir hier kennen [...]

well the the people we know here [...]

(122) C14 IS80: das ist die die Mehrheit [...]

that is the the majority [...]

Isabel utilizes repetitions of demonstrative pronouns (RDE) exclusively in her German conversations. She mainly uses repetitions of demonstrative pronouns on their own, as shown in example (124). In example (123), however, we see one of the rare repetitions that has a lexical filler between the first and second utterance of the demonstrative.

(123) C5 IS60: also manchmal .. wenn- .. das ja das kommt auch drauf ja [...]

well sometimes .. when- .. that yeah that also depends yeah [...]

(124) C14 IS131: aber ich denk das das ist die Verantwortung das ist das Problem [...]

but I think <u>that that</u> is the responsibility that is the problem [...]

Isabel produces false starts with personal pronouns (SPE) rarely in all four conversations. In example (125) she talks about a party that she and her family plan to organize. Initially she starts to talk about her party but realizes that she should or wants to include her family members, as it is their party and not her party alone. In example (126) Isabel seems to abandon her original turn-constructional unit to give Gordon additional information. However, she does not return to her original utterance. The same is the case for example (128). In example (127) Isabel most likely thinks that she has chosen an incorrect grammatical form to express her idea, therefore she replaces 'wir' with 'mit uns.'

(125) C6 IS307: <u>I-</u> we wanted to make a big party [...]

(126) C13 IS130: and <u>you-</u> and we had all the boxes and all the things [...]

(127) C5 IS105: und alle alle die <u>wir-</u> die mit uns gesprochen haben [...]

and all all those <u>we-</u> that talked to us [...]

(128) C14 IS65: aber <u>ich-</u> also wenn ich nun von uns ausgehe [...]

but <u>I-</u> well if I consider us now [...]

Isabel utilizes no repetitions of indefinite articles (RIA) in her German dialogue with Gordon and uses very few of them in her other three conversations.

She uses them either with a lexical item between the first and second articulation of the indefinite article as shown in example (129) or with no elements between both articles as illustrated in examples (130) and (131).

(129) C6 IS203: and there was a like a big family living there [...]

(130) C13 IS115: and then we have a a man a farmer who sells honey [...]

(131) C5 IS40: aber es sind keine keine jetzt neu ausgedachten glaub ich [...]

but those are no no newly invented ones now I think [...]

False starts with conjunctions (SC) occur only sporadically in Isabel's data. In her English conversations she uses them in combination with the lengthening of sounds, as is demonstrated in examples (132) and (133). Both German examples illustrate cases where Isabel wishes to provide additional information before uttering her originally planned turn-constructional unit.

(132) C6 IS224: a=nd- or sometimes they put it on the floor [...]

(133) C13 IS63: a=nd- uhm but he liked that [...]

(134) C5 IS196: oder- und da braucht keiner da sein [...]

or- and nobody needs to be there [...]

(135) C14 IS12: ja ja das ist das Problem dass- man man muß natürlich sagen das ist nicht okay aber ... ja? [...]

yeah yeah that is the problem <u>that-</u> of course one one

has to say it is not okay but ... right? [...]

The analysis of Isabel's data makes it clear that her behavior concerning the ten most common repetitions and false starts changes often according to the language used, but only for a single feature by the gender of her addressee. Regarding the total number of these ten most frequently used self-repair strategies, Isabel produces significantly more of them in her non-native language of English as compared to German. In particular, she uses significantly more repetitions of personal pronouns, more repetitions of pronouns and conjugated verb forms or verbal phrases, and more repetitions of prepositions in her English conversation than in her German talk, and she uses more repetitions of demonstrative pronouns in her German data than in her English data. She repeats demonstrative pronouns significantly more often in her opposite-gender conversations than in her same-gender talk.

5.6 Gordon's repetitions and false starts

The quantitative presentation of Gordon's repetitions and false starts is displayed in Table 5.6. The following qualitative consideration of Gordon's behavior regarding these same features consists of the analysis of representative examples chosen from his four conversations.

Table 5.6: Gordon's repetitions and false starts

Self-repair	ES	EO	GS	GO	E	G	χ^2	S	O	χ^2
RPE	44	15	14	21	59	35	6.1*	59	35	5.8*
RC	23	15	6	12	38	18	7.6*	29	26	.2
SPV	16	7	10	6	22	15	1.2	25	12	4.3*
RPV	22	11	8	1	34	10	13.5*	31	13	7.4*
RP	3	19	18	15	22	33	2.1	21	34	3.0
RDA	9	21	6	5	30	11	9.3*	15	26	2.9
RDE	1	5	1	6	6	7	.1	2	11	5.4*
SPE	8	3	4	5	11	8	.4	11	8	.6
RIA	6	8	7	2	14	9	.8	13	11	.2
SC	4	2	12	2	6	14	3.3	16	4	7.6*
Total	137	105	85	74	242	159	16.9*	222	179	4.6*

Legend: E = English, G = German, S = Same-gender partner, O = Opposite-gender partner. Data standardized for 3,500 words per conversation. All frequencies have been rounded to the nearest integer. χ^2 for $p \leq .05 \geq 3.84$ (1df). An asterisk indicates a significant chi-square value.

Gordon employs repetitions of personal pronouns (RPE) frequently in all four conversations. He uses them significantly more often in his English dialogues than in the German dialogues. He almost exclusively repeats personal pronouns without uttering any other lexical or quasi-lexical items between the first and second pronoun, as the following four examples illustrate.

(136) C3 GO292: and for years I I saw it on TV= [...]

(137) C13 GO272: I I always find you you- if you're a foreigner [...]

(138) C4 GO2: und wir wir haben damals geglaubt [...]

and at that time we we thought [...]

(139) C14 GO311: man man kämpft eigentlich mit der Umwelt [...]

one one actually struggles with the environment [...]

Gordon is the only participant in this study who uses repetitions of conjunctions (RC) significantly more often in his English conversations than in his German conversations. He typically utilizes one or several quasi-lexical fillers between the first and second articulation of the conjunction, as can be seen in examples (140), (141), and (142). Example (143) illustrates that Gordon occasionally repeats conjunctions with no elements between the first and second utterance of the conjunction.

(140) C3 GO3: and uh and uh .. I used to have more success [...]

(141) C13 GO231: but uh but the feeling of freedom that must be something[...]

(142) C4 GO127: und eh eh eh und auch da da das sieht man [...]

and uh uh uh and also one sees i i it [...]

(143) C14 GO133: und dann dann gibts Probleme [...]

and then then there occur problems [...]

Gordon produces false starts with pronouns and conjugated verb forms or verbal phrases (SPV) in his German and English conversations. In example (144) he interrupts himself to modify his turn-constructional unit. In (145) we see an example

of a slip of the tongue, most probably caused by something Gordon said immediately before, namely "I I find that really shocking." In example (146) Gordon seems to search for the correct German words to express his thoughts to Sven. The German verb 'tragen' has nothing to do with what he is about to talk about, namely the influence of fundamentalists' beliefs on the North American school system and curriculum. The second false start in the same turn-constructional unit is another slip of the tongue. He starts to utter the antonym 'manchmal' when he really wants to say 'oft.' In example (147) it is not clear why he changes his mind. He could have said "wir kamen nach Edmonton," but maybe he wants to be more precise and make sure that Isabel understands that they did not only come for a brief visit but for a longer stay. In that case the false start occurs because Gordon probably finds his initial word choice inappropriate.

(144) C3 GO372: that was really- well I I thought the British game was really amazing [...]

(145) C13 GO211: and they fi- and they are also people that I know [...]

(146) C4 GO167: das träg- ehm eh besonders ma- eh ich sehe das oft in Alberta [...]

it carri- uhm uh especially som- uh I often see that in Alberta [...]

(147) C14 GO331: wir wir wir kamen- wir sind nach Edmonton gezogen

we we we came- we moved to Edmonton

Repetitions of pronouns and conjugated verb forms or verbal phrases (RPV) are found in Gordon's four conversations. Like most of the participants in this study, he utilizes them significantly more often in his English conversations. There, they often consist of pronouns and contracted verb forms, which can be seen in examples (148) and (149). Both German examples are similar to the English ones as they illustrate that Gordon does not use any lexical or quasi-lexical items between the first and second articulation of the pronoun-verb-combination.

(148) C3 GO180: when you do go out it's it's in your street clothes [...]

(149) C13 GO18: so in other- uh that makes him he's he's too young uh

(150) C4 GO6: und wir wohnten wir wohnten in Toronto [...]

and we lived we lived in Toronto [...]

(151) C14 GO196: in St. Albert ist das ist das geschehen [...]

it has it has happened in St. Albert [...]

Repetitions of prepositions (RP) are the second most prominent feature in Gordon's data and one that he uses more often in his German conversations. In both languages he sometimes repeats the turn-constructional unit twice, which is illustrated in examples (153) and (154). He mostly utters the repetitions with no lexical or quasi-lexical elements between them, as shown in examples (152), (153), and (155). However, occasionally he uses an item between the repeated elements, for example, in (154) he uses the indefinite article 'ein' between the first and second repetition of the preposition 'für.'

(152) C3 GO332: uh I met a few on on the street or someplace [...]

(153) C13 GO112: and the the speed and the density of of of Toronto can be really- it really is much more stressful [...]

(154) C4 GO12: und da hatte ich die Gelegenheit für für ein für ein Jahr unbedingt nach Edmonton zu kommen [...]

and then I had the opportunity to come to Edmonton no matter what for for a for a year [...]

(155) C14 GO158: in einem Restaurant rauchen zu viele Leute besonders also auf auf der Uni da [...]

in a restaurant too many people are smoking especially well at at the university there [...]

Gordon also employs repetitions of definite articles (RDA) in all his conversations and significantly more often in his English data. He recycles definite articles with or without quasi-lexical fillers between their first and second articulation. The former is shown in examples (157) and (159), and the latter is illustrated in examples (156) and (158).

(156) C3 GO63: they- since they've renovated and put in all the the weight machinery and that that lovely .. upper floor track [...]

(157) C13 GO21: what's the uh uh the population how how big a city uh is is Fürth? [...]

(158) C4 GO79: ja ... ja der der Unterschied eh der Unterschied fängt auch wahrscheinlich schon im Osten an [...]

yeah ... yeah the the difference uh the difference probably already starts in the east [...]

(159) C14 GO243: eh und eh die eh eh die Lastwagen konnten nicht durch um das wegzuräumen [...]

uh and uh the uh uh the trucks couldn't get through to clear it [...]

Gordon repeats demonstrative pronouns (RDE) rather seldom, but does so in all four conversations. Between the first and second articulation of the demonstrative he does not utter any quasi-lexical or lexical items. All four examples display that fact.

(160) C3 GO63: they- since they've renovated and put in all the the weight machinery and that that lovely .. upper floor track [...]

(161) C13 GO105: and that that sort of contentious feeling is no fun [...]

(162) C4 GO235: das das ist etwas .. das ist ein positives Erlebnis [...]

that that is something .. it is a positive experience [...]

(163) C14 GO272: ja das das könnte gefährlich werden [...]

yeah that that could become dangerous [...]

False starts with personal pronouns (SPE) are another feature that Gordon does not produce often, but does so in all four conversations. The first three examples show cases in which Gordon interrupts himself because he wants to give the addressee additional information before making his point. In example (167) it seems that he started with incorrect word order and stops himself to remedy that.

(164) C3 GO249: but uh you can- we- they have sort of a special belt [...]

(165) C13 GO194: but they- I I'm glad [...]

(166) C4 GO28: ehm wir- eh meine Frau hat auch eine Stellung [...]
uhm we- uh my wife also has a position [...]

(167) C14 GO188: und eh eh da wir- eh da sind wir in ein Restaurant gegangen [...]
and uh uh then we- uh we then went to a restaurant [...]

Gordon's repetitions of indefinite articles (RIA) are comparable to his repetitions of definite articles. He sometimes repeats them more than once, which is shown in example (168), and he may or may not use quasi-lexical fillers between the first and second articulation of the article, as can be seen in the following four examples.

(168) C3 GO447: I I spent a a a resea=rch semester or two in Germany [...]

(169) C13 GO110: uh. in many many other cities like Toronto for example .. to get a a reasonable uh place to live .. involves being W.AY out [...]

(170) C4 GO89: und vielleicht ist das nur ein ein ganz subjektiver Eindruck [...]

and maybe that's only a a very subjective idea [...]

(171) C14 GO219: und das hat eine eh eine merkbare Wirkung eh auf das Wetter [...]

and it has a uh a noticeable impact uh on the weather [...]

False starts with conjunctions (SC) are seldom produced, but occur in all of Gordon's four conversations. Example (172) illustrates the initial usage of a less appropriate conjunction. Example (173) is an exceptional case where two false starts with conjunctions are produced in the same turn-constructional unit. Both occur because of Gordon's wish to give Isabel more information before making his planned point. Example (174) is fairly similar to the previous one. Here two false starts are found in the same turn-constructional unit for the same reason. In example (175) Gordon first chooses a conjunction that he does not need, but that would not be wrong either. The cut-off and the selected word order suggest that he prefers to make his point without the conjunction.

(172) C3 GO185: but then uh when- if you get used to [...]

(173) C13 GO172: that- uh when- the first time I studied in Germany [...]

(174) C4 GO38: aber- eh eh und eh eh eh wir hie=lten- wir waren aus Toronto [...]

but- uh uh and uh uh uh we he=ld- we were from Toronto [...]

(175) C14 GO222: das ist auch vor neun Jahren passiert dass- eh der Winter war nicht so schlimm

That happened nine years ago as well that- uh the winter wasn't so hard

The quantitative and qualitative investigation of Gordon's usage of the ten most common repetitions and false starts reveals that he changes his conversational behavior depending on the language he speaks and on the gender of his interaction partner. The total number of these ten self-repair strategies is significantly higher when Gordon speaks English as compared to when he speaks German and when he speaks to a same-gender partner as compared to when he speaks to an opposite-gender addressee. He employs repetitions of personal pronouns, repetitions of conjunctions, repetitions of pronouns and conjugated verb forms or verbal phrases, and repetitions of definite articles significantly more often in his first language English than in his second language German. He also utilizes repetitions of personal pronouns, false starts with pronouns and conjugated verb forms, repetitions of pronouns and conjugated verb forms, along with false starts with conjunctions

significantly more often with a same-gender partner than with an opposite-gender partner. At the same time, he uses repetitions of demonstrative pronouns significantly more often with a woman than with a man.

5.7 Henry's repetitions and false starts

Henry's repetitions and false starts are presented in a quantitative manner in Table 5.7. The qualitative presentation follows and contains the description and discussion of representative examples from Henry's four conversations.

The repetitions of personal pronouns (RPE) are Henry's third most frequent means to repair utterances in progress. He utilizes it significantly more often with a same-gender partner than with an opposite-gender partner. The examples chosen show that in both languages Henry repeats personal pronouns without articulating quasi-lexical or lexical items between the repeated elements.

(176) C2 HE9: I I always feel that LO=Nger stays are more uhm beneficial [...]

(177) C16 HE80: no because he he did a similar thing [...]

(178) C1 HE24: und ich ich hab auch gern die die Fotografien gesehn [...]
and I I also liked to look at the photographs [...]

(179) C15 HE122: aber sie sie dachten- eh vor allem die Kollegen waren dagegen [...]

but <u>they they</u> thought- uh especially the colleagues were against it [...]

Table 5.7: Henry's repetitions and false starts

Self-repair	ES	EO	GS	GO	E	G	χ^2	S	O	χ^2
RPE	24	7	18	2	31	20	2.5	42	9	20.7*
RC	15	11	32	11	26	43	4.1*	47	21	9.7*
SPV	7	21	4	15	28	18	1.9	10	36	14.8*
RPV	13	18	4	13	31	16	4.4*	17	31	4.2*
RP	20	11	18	13	30	31	.004	37	23	3.2
RDA	9	0	28	2	9	30	12.0*	37	2	31.2*
RDE	0	7	18	11	7	28	12.8*	18	18	.0
SPE	4	5	0	6	10	6	.6	4	12	3.4
RIA	9	12	10	15	21	25	.3	19	27	1.5
SC	7	2	4	0	8	4	2.0	10	2	5.7*
Total	111	94	134	87	204	221	.7	245	181	9.4*

Legend: E = English, G = German, S = Same-gender partner, O = Opposite-gender partner. Data standardized for 3,500 words per conversation. All frequencies have been rounded to the nearest integer. χ^2 for $p \leq .05 \geq 3.84$ (1df). An asterisk indicates a significant chi-square value.

Henry's most prominent feature is the repetition of conjunctions (RC). He employs it significantly more often in German than in English and with a same-gender partner than with an opposite-gender partner. Sometimes he lengthens one or both conjunctions, as shown in example (180), and often he utilizes quasi-lexical

fillers between them, which can be seen in examples (181), (182), and (183). The last example contains an additional pause after the usage of the filler.

(180) C2 HE76: a=nd and the the weaknesses could already be seen in the discussion that took place there [...]

(181) C16 HE4: and uh and was it connected with university? [...]

(182) C1 HE38: wenn eh wenn die Leute .. a=h sehen dass e=h dass man VERsucht [...] etwas in der Landessprache zu sagen [...]

when uh when the people .. a=h see that u=h that one tries [...] *to say something in that country's language* [...]

(183) C15 HE130: und eh ... und wir haben dann immer die Möglichkeit beibehalten [...]

and uh ... and then we always kept the opportunity open [...]

Henry also makes frequent use of false starts with pronouns and conjugated verb forms or verbal phrases (SPV), particularly with an opposite-gender addressee. Most of his false starts with pronouns and conjugated verb forms or verbal phrases occur because he wants to choose more appropriate words to express his ideas. This can be seen in examples (184), (185), and (187). Example (186) shows a rather

unique case in which Henry prefers to rephrase a planned statement and transforms it into an indirect question.

(184) C2 HE189: they had- uh the university was u=h of particular interest to them [...]

(185) C16 HE194: that there is a .. a a congregation that uh every other week is holding- uh has services held in Danish [...]

(186) C1 HE88 :e=h .. vielleicht ja gi=bt es ja- ...das ist die große Frage ob e=hm ob man die e=hm Handlungsweisen [...] irgendwie eh stoppen kann [...]

u=h .. maybe yeah there are yeah- ... that's the question whether u=hm whether one can somehow uh stop u=hm a certain behavior [...]

(187) C15 HE34: ja es waren- e=h man hat mich in einer e=h Konferenz .. so angesprochen [...]

yeah there were- u=h I've been approached at a u=h conference [...]

The repetition of pronouns in combination with conjugated verb forms or verbal phrases (RPV) is the only feature that Henry employs significantly more often in his English conversations than in his German dialogues. These repetitions are utilized in many different ways, either with no element interposed between the first and second articulation, which is illustrated in the two German examples, or with a

pause between them, as can be seen in example (188). Henry also uses quasi-lexical fillers between both pronoun-verb-combinations or lexical items, as shown in example (189).

(188) C2 HE25: we do .. we do know that every time the uh ... every time the uh ... ECONOmy gro=ws [...]

(189) C16 HE207: yes that's when yeah and that's when they have to really get out and uh do their stuff [...]

(190) C1 HE56: und eh ich ich glaube ich glaube schon dass sie das können

and uh I I believe I do believe that they can do that

(191) C15 HE159: der erste Winter .. ehm ... ja das war das war schön kalt [...]

the first winter .. uhm ... yeah it was it was pretty cold [...]

The repetition of prepositions (RP) is the second most frequently used repetition type in Henry's conversations. Most of the time he recycles prepositions without uttering anything between their occurrences, which can be seen in all four examples below. Sometimes he pauses briefly before uttering the second preposition, as illustrated in example (194).

(192) C2 HE99: yes yeah uh uh there are uhm preconceptions of of what it means to be left wing [...]

(193) C16 HE64: yes so that's gone down in in the family history [...]

(194) C1 HE75: was für ... FOLgen würde das haben für .. für den Welthandel? [...]

what kind of ... CONsequences would that have for .. for international trade? [...]

(195) C15 HE128: und sie waren auch dafür dass man eh so ei=n ziemlich breites breites Spektrum von von Kursen belegen würde [...]

and they also suggested that one uh should take a rather broad broad range of of courses [...]

Henry repeats definite articles (RDA) significantly more often in his German data. In fact, he does not utilize repetitions of definite articles at all in his English conversation with Lauren. Between the first and second utterance of the article he might use nothing as in examples (196) and (198), or he might use a lexical or a quasi-lexical filler. Both these cases are illustrated in example (197).

(196) C2 HE152: and they came here particularly to .. to uh examine the the local facilities [...]

(197) C1 HE82: und e=h also die ja- .. die die Psychologie de=s eh des Landes würde daran leiden [...]

and u=h well the yeah- .. the the psychology of the uh the country would suffer because of it [...]

(198) C15 HE80: [...] in anderen Ländern .. ehm hatte man <u>das das</u> Vorbild an den deutschen Universitäten

[...] *in other countries .. uhm one had <u>the the</u> model of the German universities*

Henry also uses significantly more repetitions of demonstrative pronouns (RDE) in his German conversations than in his English talk. In fact, he does not recycle demonstrative pronouns at all when speaking English with Werner. In examples (200) and (201), Henry repeats demonstratives and does not articulate any quasi-lexical or lexical elements between them. However, in example (199) the usage of a lexical filler between the two pronouns is observed.

(199) C16 HE113: so <u>this</u> yeah <u>this</u> was his contribution [...]

(200) C1 HE11: und <u>das das</u> genügt mir

and <u>that that</u> is enough for me

(201) C15 HE42: und sie haben mich gebeten eh <u>diesen diesen</u> Job zu nehmen [...]

and they asked me uh to accept <u>this this</u> job [...]

False starts with personal pronouns (SPE) are a less common feature in Henry's conversations. He does not use them at all in his German conversation with Werner. In most cases, Henry has false starts with personal pronouns when he wants to give the addressee additional information. All of the three following examples illustrate that.

(202) C2 HE40: it yes it- every time you use carbon you must lose oxygen [...]

(203) C16 HE12: I've been there yeah I- uh but not for .. any length of time [...]

(204) C15 HE131: e=hm wenn man- wenn Studenten also mehr Linguistik machen wollten als Literatur dann konnten sie das [...] *u=hm if one- if students wanted to take more linguistics classes than literature classes they could do that* [...]

Like Gordon, Henry also utilizes repetitions of indefinite articles (RIA) in the same way as he uses repetitions of definite articles. Examples (205) and (206) show how he pauses between the first and second article. Example (207) illustrates the usage of several uninterrupted indefinite articles in a row and example (208) demonstrates a brief pause and the combined articulation of a quasi-lexical and a lexical filler between both indefinite articles.

(205) C2 HE55: that's partly the=e uh their inability [...] to be a .. a serious political party [...]

(206) C16 HE198: u=h but they are still numerous enough to maintain a ... a congregation [...]

(207) C1 HE18: u=nd e=h sie schlägt vor ehm da=ss ... wi=r .. u=ns

e=hm <u>eine eine eine</u> Reise .. eine solche Reise .. so auswählen [...]

a=nd u=h she proposes uhm tha=t ...we= so choose u=hm <u>a a a</u> trip .. such a trip .. for us [...]

(208) C15 HE272: und das ist ein Nachteil oder .. irgendwie <u>eine</u> .. eh ja <u>eine</u> Schwäche

and that is a disadvantage or .. somehow <u>a</u> .. uh yeah <u>a</u> weakness

False starts with conjunctions (SC) are a less frequent self-repair type in Henry's talk as well. He uses it significantly more often with Werner than with Lauren, with whom he does not utilize it at all in the German conversation. Both English examples illustrate a strategy to hold the floor. Once a turn-constructional unit is uttered the speaker signals with a conjunction that he is not ready to yield the floor. At the same time, he plans his next turn-constructional unit which might require a different conjunction, for instance a 'but' instead of an 'and' as in example (209), or vice-versa, which is illustrated in (210). The German example (211) shows the initial choice of a less appropriate conjunction.

(209) C2 HE95: <u>and-</u> uh but it doesn't have to b=e consistent with left wing policy or right wing policy [...]

(210) C16 HE48: <u>but-</u> and the people realized- there were people [...]

(211) C1 HE272: ja ... ich e=h ... mache mir Sorgen über eh das was zu

Hause passieren könnte wa- wenn ich WEG BIN [...]

yeah ... I u=h ... am worried about eh what could

happen at home wa- when I'm GONE [...]

Summarizing the quantitative and qualitative analysis of Henry's repetitions and false starts, it is clear that he changes his behavior according to the language he speaks and the gender of his interaction partner. Henry employs significantly more repetitions of conjunctions, repetitions of definite articles, and repetitions of demonstrative pronouns when talking German than when speaking English, while he utilizes significantly more repetitions of pronouns and conjugated verb forms or verbal phrases in his English conversations than in his German conversations. Henry employs these ten most frequent repetitions significantly more often when talking to a man as compared to when talking to a woman. He especially uses significantly more repetitions of personal pronouns, repetitions of conjunctions, repetitions of definite articles, and false starts with conjunctions when speaking to a same-gender addressee than when speaking to an opposite-gender addressee. On the other hand, he produces significantly more false starts with pronouns and conjugated verb forms or verbal phrases and repetitions of pronouns and conjugated verb forms or verbal phrases with a woman than with a man.

5.8 Werner's repetitions and false starts

The quantitative presentation of Werner's usage of the ten most common repetitions and false starts is given in Table 5.8. The qualitative analysis that consists of a discussion of representative examples taken from his four conversations starts below.

Table 5.8: Werner's repetitions and false starts

Self-repair	ES	EO	GS	GO	E	G	χ^2	S	O	χ^2
RPE	6	4	4	6	10	10	.001	10	9	.02
RC	0	15	6	6	15	12	.4	6	21	7.7*
SPV	9	11	10	14	20	24	.3	19	25	.8
RPV	3	10	0	0	12	0	12.4*	3	10	3.5
RP	9	6	4	0	15	4	5.8*	13	6	2.8
RDA	6	4	8	11	10	19	3.1	14	15	.01
RDE	0	0	2	3	0	5	4.8*	2	3	.08
SPE	12	0	6	0	12	6	1.7	18	0	17.9*
RIA	9	10	0	3	18	3	11.6*	9	12	.6
SC	0	4	0	8	4	8	1.6	0	12	12.0*
Total	53	63	41	49	115	90	3.0	94	112	1.5

Legend: E = English, G = German, S = Same-gender partner, O = Opposite-gender partner. Data standardized for 3,500 words per conversation. All frequencies have been rounded to the nearest integer. χ^2 for $p \leq .05 \geq 3.84$ (1df). An asterisk indicates a significant chi-square value.

Unlike most subjects, Werner does not use many repetitions of personal pronouns (RPE), but he employs them in all four conversations. Typically he recycles the pronouns without a pause or quasi-lexical or lexical item between them, as is illustrated in the first three examples. However, example (215) shows the unusual combined repetition of a conjunction and a personal pronoun.

(212) C2 WE93: [...] that doesn't work unless yo=u- I mean it it works FINE unless there is a a particular agenda

(213) C9 WE159: uhm and they they are having a lot of fun [...]

(214) C1 WE129: de=nn wir wir wissen ja dass da mehr ist [...]
because we we do know that there is more [...]

(215) C10 WE30: besonders wenn sie wenn sie jung waren [...]
especially if they if they were young [...]

The repetition of conjunctions (RC) is Werner's second most frequently utilized feature to repair an utterance in progress. He does not employ it in his English conversation with Henry and uses it significantly more often with an opposite-gender partner than with a same-gender partner. When recycling conjunctions, Werner usually uses a pause, a quasi-lexical filler, a lexical filler, or another lexical element between the articulation of both conjunctions. The usage of the pause is demonstrated in example (216), whereas example (217), which contains two repetitions of the same conjunction, shows the usage first of a quasi-lexical and subsequently of a lexical filler. The last example contains a false start that provokes

or triggers the repetition so that a cut-off definite article is uttered between both conjunctions. The second 'und' marks the restart.

(216) C9 WE190: I would have stayed in Germany ☺ and .. and not come here certainly [...]

(217) C1 WE70: und ehm und ja und ich muß sagen .. das mag ich nicht sehr [...]

and uhm and yeah and I have to say .. I don't like that so much [...]

(218) C10 WE137: und die- und ich hoffte dass sie es dieses Jahr wieder einmal schaffen würde [...]

and it- and I hoped that it would manage that again this year [...]

Of the ten most common repetitions and false starts, Werner produces false starts with pronouns and conjugated verb forms or verbal phrases (SPV) most often and in all four conversations. Example (219) illustrates a case in which Werner wishes to give the addressee additional information. It is noteworthy that he stresses 'and,' the word with which he restarts his turn-constructional unit, and in doing so draws attention to the restart. Example (220) demonstrates the production of a false start caused by the search for an appropriate word or words, which is obvious because of the accumulation of quasi-lexical and lexical fillers following the cut-off. Example (221) shows the initial usage of an incorrect auxiliary that is being

corrected after the cut-off, and the last example contains a modification of the original statement after the false start and cut-off.

(219) C2 WE50: and they can have a political effect it's- AND I think they have come to the the conclusion as well [...]

(220) C9 WE130: and it's- uh so uh it always causes great uhm well agitation [...]

(221) C1 WE49: eh .. also eh wir hatten- eh wir waren eh eigentlich 'ne kleine Gruppe [...]

uh .. well we had- uh .. we were uh actually a small group [...]

(222) C10 WE42: und das sind- eh sie wollen keine <E Hell's Angels E> sein [...]

and they are- uh they don't want to be Hell's Angels [...]

Werner employs no repetitions of pronouns and conjugated verb forms or verbal phrases (RPV) in his German conversations, but repeats them in both English dialogues. As shown in both examples, he always recycles pronouns combined with the contraction of a verb form, either with no elements between the first and second utterance of the combined pronoun-verb or with a lexical element that is repeated as well.

(223) C2 WE24: and it's it's especially this WEEKend tourism [...]

(224) C9 WE127: well ... well it's it's like-

Werner also repeats prepositions (RP) significantly more often in his English conversations than in his German talk. In fact, he does not employ this feature at all in his German conversation with June. Werner either utilizes no elements between the prepositions, as is illustrated in example (225), or he uses quasi-lexical fillers between them, which is shown in examples (226) and (227).

(225) C2 WE10: because one can certainly see from our- uh in in the provincial affairs [...] that it is possible to stop certain developments [...]

(226) C9 WE55: lots of people talking at uh at very high levels of voice

(227) C1 WE164: ja also das sind enorme Folgen [...] für eh für die also Sehenswürdigkeiten für Tours und eh Straßenbau etc. ja?

yeah well those are enormous consequences [...] for uh for the well sights for tours and uh street construction etc. right?

Werner uses repetitions of definite articles (RDA) rather frequently and in all four conversations. He typically repeats definite articles without using any item between the first and second article, as is demonstrated in examples (228) and (230). The second English example is an exceptional case of a combined repetition of a relative pronoun and a definite article. Werner seems to be playing for time – he also

uses lengthening – because he is searching for an appropriate English word, but finally decides to code-switch. Similar approaches have been observed in Sue's and June's data and have been presented in examples (23) and (89).

Example (231) shows a rare case of a double repetition of a definite article combined with a quasi-lexical filler. Here, it is again quite obvious that the repetitions serve as a delaying tactic while the speaker is searching for an appropriate word. This is particularly clear since Werner reveals ("wie immer diese schönen Dinge heissen...," "*whatever those nice things are called...*") that he cannot recall the name of those fruits.

(228) C2 WE48: but the the Greens are a fact of life in Germany nowadays [...]

(229) C9 WE128: where th=e where the <G Reformhaus G> is located [...]

(230) C1 WE112: der [...] auf einer Stadtführung die die Stadt kennen lernt [...]
who [...] *gets to know the the city on a sight seeing tour* [...]

(231) C10 WE152: der hat sich auch schon sehr schön gefärbt und auch die eh die die Früchte Früchte wie immer diese schönen Dinge heissen eh die man Kinder an die Nase stecken soll

it has already changed color quite nicely and so have

the uh the the fruits whatever those nice things are

called uh that you should stick on children's noses

Repetitions of demonstrative pronouns (RDE) are the only feature that Werner uses infrequently, if exclusively in his German conversations. He combines the repetitions with the lengthening of sounds but not with any other elements, as both examples demonstrate.

(232) C1 WE57: und di=e die waren also mit uns diese fünf Tage [...]

and tho=se those were well with us during these five days [...]

(233) C10 WE73: aber di=e die- eh .. ich dachte eben an Ihre Eltern [...]

but the=se these- uh .. I just thought about your parents [...]

Werner produces false starts with personal pronouns (SPE) only in his conversations with a same-gender partner in both languages. Example (234) illustrates the occurrence of a false start most probably due to the speaker's wish to add to a topic before it shifts into a certain direction or to a 'point of no return.' In (235), on the other hand, Werner simply chooses an 'incorrect' pronoun that needs to be exchanged.

(234) C2 WE71: but certainly it- uh on the other hand isn't it a problem for a party to be kind of a one-issue party? [...]

(235) C1 WE96: dass es- dass man einfach ausgebeutet wird

that it- that one simply gets exploited

Werner utilizes repetitions of indefinite articles (RIA) in both languages, but uses them significantly more often in English than in German. Moreover, he does not employ any in his German conversation with Henry. Examples (236) and (237) are comparable to the way he uses repetitions of definite articles. However, in (238) an exceptional case is illustrated in which more than the indefinite article is repeated in an attempt to gain time and find an appropriate expression.

(236) C2 WE96: unless there is a a particular agenda [...]

(237) C9 WE118: and there used to be a also a a hairdresser [...]

(238) C10 WE149: und da so 'nen so 'nen Punkt drin so 'nen Farbpunkt [...]

and there such a such a dot in it such a colored dot

[...]

While Werner produces false starts with personal pronouns exclusively with a same-gender addressee, he has false starts with conjunctions (SC) solely with an opposite-gender partner. Example (239) illustrates one of those cases where the speaker utters a conjunction after a turn-constructional unit has been finished in order to keep the floor, but he then discovers that he needs a different conjunction to make his next point. In example (240), he seems to agree with what June just said, but then Werner changes his mind and adds a contrasting point.

(239) C9 WE51: and- uh ... but there are several .. uh several other places [...]

(240) C10 WE27: ist sehr wahrscheinlich dass- eh na auf der andern Seite wenn Ihre Eltern [...]

is very probable that- uh well on the other hand if your parents [...]

The quantitative and qualitative presentation of Werner's repetitions and false starts reveals that he changes his conversational strategies depending on the language he speaks and the gender of the addressee to whom he talks. Werner employs significantly more repetitions of pronouns and conjugated verb forms or verbal phrases, repetitions of prepositions, and repetitions of indefinite articles in his English data than in his German data, and he utilizes repetitions of demonstrative pronouns solely in his German conversations. Werner also produces significantly more repetitions of conjunctions and more false starts with conjunctions with an opposite-gender partner than with a same-gender partner. He produces false starts with personal pronouns exclusively with a same-gender addressee.

5.9 Sven's repetitions and false starts

Table 5.9 presents Sven's conversational behavior regarding the ten most frequently used repetitions and false starts. The following qualitative analysis of

these same features contains a detailed description of representative examples employed by Sven in his four conversations.

Table 5.9: Sven's repetitions and false starts

Self-repair	ES	EO	GS	GO	E	G	χ^2	S	O	χ^2
RPE	28	20	10	10	48	20	11.6*	38	30	.9
RC	12	13	28	10	25	38	2.9	40	23	4.8*
SPV	14	13	8	6	27	14	3.7	22	19	.3
RPV	20	10	8	4	30	12	7.6*	29	14	4.9*
RP	14	10	3	6	24	10	6.4*	18	16	.05
RDA	0	0	3	8	0	12	11.5*	3	8	2.1
RDE	0	0	3	0	0	3	3.3	3	0	3.3
SPE	6	5	3	12	11	16	.8	9	17	2.3
RIA	2	0	0	0	2	0	2.0	2	0	2.0
SC	2	13	7	4	15	11	.6	9	17	2.5
Total	99	82	74	62	182	136	6.7*	173	144	2.7

Legend: E = English, G = German, S = Same-gender partner, O = Opposite-gender partner. Data standardized for 3,500 words per conversation. All frequencies have been rounded to the nearest integer. χ^2 for $p \leq .05 \geq 3.84$ (1df). An asterisk indicates a significant chi-square value.

Repetitions of personal pronouns (RPE) are Sven's most often employed repetition type. He repeats personal pronouns significantly more often in English than in German. He mostly repeats the pronouns without using any additional elements, as is demonstrated in examples (241), (242), and (244). Occasionally Sven

utilizes quasi-lexical fillers or lengthening in addition to the recycled personal pronouns. The latter can be seen in example (243).

(241) C3 SV6: BUT I I'm only constrained by my teaching schedule

(242) C12 SV128: but I I somehow liked it [...]

(243) C4 SV35: j=a ... i=ch ich weiß es nicht [...]

ye=ah ... I= I don't know [...]

(244) C11 SV82: und- .. so dass ich ich selber das Gefühl hab [...]

and- .. so that I I myself have that feeling [...]

Sven also employs repetitions of conjunctions (RC) very frequently. He makes use of them significantly more often when talking to a same-gender partner than when talking to an opposite-gender partner. He recycles conjunctions with a pause between them, as shown in example (245), without any additional elements, which is demonstrated in example (246), or he repeats them in combination with other lexical elements such as personal pronouns, as illustrated in both German examples. In (248) he pronounces the personal pronoun 'ich' only partially.

(245) C3 SV122: a=nd I think that .. that it was important [...]

(246) C12 SV119: but but I really don't know [...]

(247) C4 SV258: weil wir weil wir am Wochenende versucht haben ...

da reinzufahren [...]

because we because we tried to ... enter on a weekend

[...]

(248) C11 SV137: dass i- dass ich auch einfach von 'ner Frage überrascht war [...]

that i- that I was also surprised by a question [...]

False starts with pronouns and conjugated verb forms or verbal phrases (SPV) are produced more often in Sven's English data than in his German data. In example (249) the false start and cut-off seem to mirror Sven's uncertainty. In (250) he decides to use another verb that must seem more appropriate to him than the original one. Example (251) illustrates a case in which he wants to be more precise and not just state that what Gordon just said was strange, but that it *seemed* strange to Sven and his family, too. The last example demonstrates the usage of an incorrect verb form that Sven replaces with a correct one after the cut-off.

(249) C3 SV47: and .. and I think that's- ... yeah I don't know [...]

(250) C12 SV30: but after two years it's- it goes much better [...]

(251) C4 SV101: das is- das kam uns auch unheimlich seltsam vor [...]

that is- that seemed extremely strange to us as well [...]

(252) C11 SV121: ich hab- ich war den ganzen Tag damit beschäftigt [...]

I have- I was occupied with that the whole day [...]

Sven employs repetitions of pronouns and conjugated verb forms or verbal phrases (RPV) very frequently as well. Like most subjects he uses them significantly more often in his English conversations than in his German conversations. In his

English data they mostly consist of pronouns and contracted verb forms. He often uses them without any additional elements, which can be seen in examples (253) and (254). Sometimes he uses a brief pause or a quasi-lexical filler between the first and second usage of the pronoun-verb combination. In his German conversation he uses repetitions of pronouns and (incomplete) verbal phrases, as is demonstrated in examples (255) and (256). It is also noteworthy that Sven recycles pronoun-verb-combinations significantly more often when talking to a same-gender partner than when talking to an opposite-gender partner.

(253) C3 SV42: but it's it's really a lot of fun [...]

(254) C12 SV138: and I had I had English of course

(255) C4 SV87: jedes Mal wenn ich geh find ich's find ich's toll [...]

every time I go I find it I find it just great [...]

(256) C11 SV67: die sind ganz die sind ganz ähnlich

these are very these are very similar

Repetitions of prepositions (RP) are another feature that Sven uses significantly more often in his English data than in his German data. Sven typically repeats the preposition without using any additional lexical or quasi-lexical items. The first three examples illustrate this. In example (260) an unusual case is shown. Here, Sven modifies his statement slightly and uses the adverb 'einfach' between the first and second utterance of the preposition. The modification seems to be the reason for the repetition and not the search for a word.

(257) C3 SV198: but yeah in in the region [...] it was in a .. a circle of sixty kilometers or so

(258) C12 SV66: a=nd- but I grew up in in Nürnberg [...]

(259) C4 SV152: zum Beispiel .. in in Bayern .. gab's diesen Erlaß [...]
for example .. in in Bavaria .. this decree was proclaimed [...]

(260) C11 SV177: ich weiß dass es dass es in Edmonton schwer sein wird aus .. einfach aus organisatorischen Gründen [...]
I know that it that it will be difficult in Edmonton because of .. simply because of organisational reasons [...]

Sven employs no repetitions of definite articles (RDA) in his English conversations. In his German data, he mostly repeats definite articles without using any quasi-lexical or lexical items between the first and second utterance of the article, which is demonstrated in examples (261) and (262).

(261) C4 SV146: we=il die die Kirchen haben nicht mehr so 'n großen Einfluß [...]
be=cause the the churches don't have such a big influence anymore [...]

(262) C11 SV77: manchmal ehm fehlt mir so 'n bißchen auch die die Lehrerfahrung [...]

sometimes uhm I also lack a little (the the) teaching

experience [...]

The repetition of demonstrative pronouns (RDE) is another self-repair type that Sven uses rarely and only in his German data. The usage is similar to the one with definite articles, as example (263) illustrates.

(263) C4 SV208: also das das waren auch Punkte die uns aufgefallen sind [...]

well those those were also items that struck us [...]

Sven produces false starts with personal pronouns (SPE) in all four conversations. In example (264) the false start and cut-off occur because Sven feels the need to be more precise; it's not he who is tired but his muscles. In (265) his insecurity about a previous utterance is apparent and the same holds true for example (267). In example (266) Sven has to stop and restart because he chose an inappropriate word, namely the pronoun 'man,' to express his point.

(264) C3 SV171: I- .. my MUScles are really tired afterwards [...]

(265) C12 SV82: I- .. but maybe I'm I'm wrong ☺

(266) C4 SV225: er meinte es wär so toll in Nordamerika könnte man schon die Dinge kaufen die man- die dann in Europa zwei Jahre später Trend werden und so [...]

he said it would be so great in North America there you could already buy things that one- that then will

become trendy in Europe two years later and so on

[...]

(267) C11 SV9: i=ch- e=h ja doch ich mein 's ist okay [...]

I=- u=h yeah sure I mean it's okay [...]

Sven utilizes repetitions of indefinite articles (RIA) least often of these ten self-repairs under consideration and only in his English data. Example (268) shows that he employs a brief pause between the utterance of the first and second indefinite article.

(268) C3 SV200: it was in a .. a circle of sixty kilometers or so

False starts with conjunctions (SC) are found in all of Sven's conversations. Examples (269), (270), and (272) illustrate strategies to hold the floor. In example (271), Sven abandons his initially planned turn-constructional unit to supply Gordon with more information before he returns and finishes the original utterance.

(269) C3 SV108: I- .. and- .. or when I learned for my exam [...]

(270) C12 SV145: and- uh .. but yeah when I was in Germany [...]

(271) C4 SV18: dass- das erste was uns wirklich aufgefallen ist [...]

that- the first thing we actually noticed [...]

(272) C11 SV82: und- .. so dass ich ich selber das Gefühl hab [...]

and- .. so that I I myself have that feeling [...]

The analysis reveals that Sven's self-repair strategies as regards the ten most often used repetitions and false starts change depending on the language he speaks

and also on the gender of his addressee. He produces significantly more of them when he speaks English as compared to when he speaks German. He particularly utilizes significantly more repetitions of personal pronouns, repetitions of pronouns and conjugated verb forms or verbal phrases, and repetitions of prepositions when speaking English than when speaking German. By contrast, he employs significantly more repetitions of definite articles and more repetitions of demonstrative pronouns in his German conversations than in the English dialogues in which both these repetition types do not occur. Sven also uses significantly more repetitions of conjunctions and repetitions of pronouns and conjugated verb forms or verbal phrases when speaking to a man than when speaking to a woman.

5.10 Comparison and summary

In this part of the chapter, the patterns ascertained for the most frequently produced repetitions and false starts in English and German conversations with a same-gender partner and with an opposite-gender partner are described and discussed. The participants' ten most commonly employed self–repairs after fillers have been examined previously. These are: repetitions of personal pronouns, repetitions of conjunctions, false starts with pronouns and conjugated verb forms or verbal phrases, repetitions of pronouns and conjugated verb forms or verbal phrases, repetitions of prepositions, repetitions of definite articles, repetitions of demonstrative pronouns, false starts with personal pronouns, repetitions of indefinite

articles, and false starts with conjunctions. All these self-repairs were used on their own or in various combinations with each other or with other self-repair types, such as fillers or altered repetitions.[2] Figure 5.1 shows a formula that describes each possible repetition type:

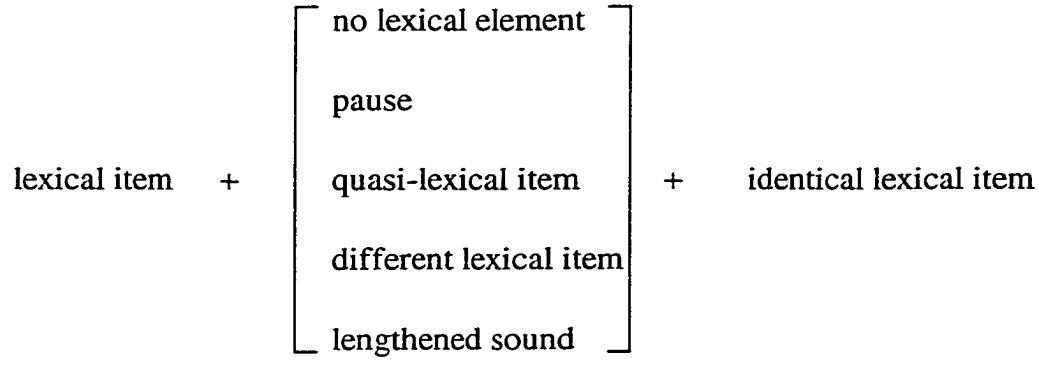

Figure 5.1: Repetition formula

Figure 5.2 represents a formula that describes each possible false start:

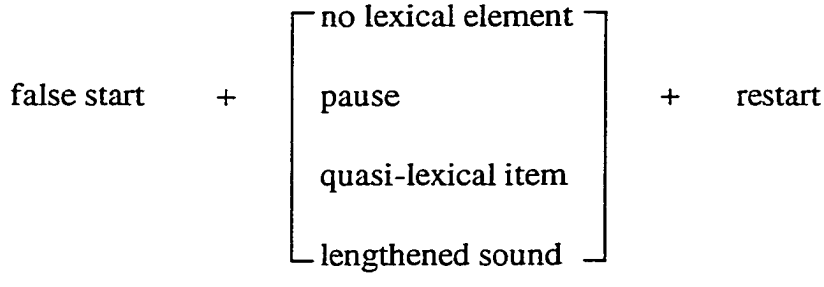

Figure 5.2: False start formula

[2] Altered repetitions are used rarely and therefore they are not investigated in this study (see also Chapter Three and Appendix C).

In the previous chapter it was shown that fillers and self-repair, in general, tend to occur in clusters. The same can be observed for repetitions and false starts in certain positions. In so-called global planning areas, that is at the beginning of a turn, not only fillers but also false starts and repetitions often occur in combination. These combinations can consist of several repetitions, false starts or their combination, or a combination of fillers and repetitions, and/or false starts. However, clustering of self-repairs does not only occur in global planning areas, many of the examples of self-repair shown in this and the previous chapter are part of a combination of self-repair strategies.

5.10.1 Effects of the language used on repetitions and false starts

For all eight subjects it has been observed that their use of repetitions and false starts changes depending on the language they speak, and for some of the participants these changes are more evident than for others. With the exception of Sue, Lauren, and Henry, all participants utilize significantly more self-repairs in their English conversations compared to their German conversations. Most of them use more repetitions of personal pronouns, more repetitions of pronouns and conjugated verb forms or verbal phrases, and more repetitions of prepositions in English than in German. On the other hand, many subjects employ more repetitions of definite articles and more repetitions of demonstrative pronouns in their German data than in the English data.

What has been said regarding language-specific effects for fillers[3] holds true for repetitions and false starts as well, namely that these effects might be due to different repair strategies resulting from the language used, either English or German, or they might be due to different repair strategies resulting from the fact that the subject is speaking her or his first language or his second language, respectively. The language-specific effects are presented in two different tables to distinguish between these two possible reasons.

Table 5.10 shows the language effects based on L1 or L2 usage. Table 5.11 presents the language effects based on whether the language spoken is English or German. The same criteria as in Chapter Four have been adopted, namely whenever at least half the participants and at least twice as many subjects are found in one column than in the other column the researcher assumes to have found a 'strong trend.'

In Table 5.10 one strong trend is discovered:

- Bilingual speakers tend to use more repetitions of prepositions in their non-native language than in their native language.

[3] See page 194.

Table 5.10: Significantly higher frequencies of repetitions and false starts in conversations in L1 versus L2

Fillers	Native language	Non-native language
RPE	Sue, Gordon	June, Isabel, Sven
RC	Gordon	Lauren, Henry
SPV		
RPV	Gordon, Henry	Isabel, Werner, Sven
RP	(Sue)	**Lauren, Isabel, Werner, Sven**
RDA	Gordon, Sven, (Sue, Werner)	Lauren, Henry
RDE	Isabel, Werner, (Sven)	Lauren, June, Henry
SPE	June	Lauren
RIA		Sue, Werner
SC		
Total	Gordon, (June)	Lauren, Isabel, Sven

Legend: Subject names appearing in brackets indicate that this particular subject uses the feature in question with a very high frequency that is statistically significant for $p \leq .10$ (χ^2 for $p \leq .10 \geq 2.71$ (1df)). Subject names not appearing in brackets indicate that this particular subject uses the feature in question with a higher frequency that is statistically significant for $p \leq .05$ (χ^2 for $p \leq .05 \geq 3.84$ (1df)). Subject names printed in bold indicate a 'strong trend.'

However, when cross-comparing Table 5.10 with Table 5.11, it could also be concluded that bilinguals tend to repeat prepositions more often in their English conversations than in their German dialogues.

Table 5.11: Significantly higher frequencies of repetitions and false starts in English conversations versus German conversations

Fillers	English	German
RPE	**Sue, Gordon, Isabel, Sven**	June
RC	Gordon	Lauren, Henry
SPV		
RPV	**Isabel, Gordon, Henry, Werner, Sven**	
RP	**Isabel, Werner, Sven, (Sue)**	Lauren
RDA	Gordon, (Sue)	**Lauren, Henry, Sven, (Werner)**
RDE		**Lauren, June, Isabel, Henry, Werner, (Sven)**
SPE	June	Lauren
RIA	Werner	Sue
SC		
Total	**Isabel, Gordon, Sven, (June, Werner)**	Lauren

Legend: Subject names appearing in brackets indicate that this particular subject uses the feature in question with a very high frequency that is statistically significant for $p \leq .10$ (χ^2 for $p \leq .10 \geq 2.71$ (1df)). Subject names not appearing in brackets indicate that this particular subject uses the feature in question with a higher frequency that is statistically significant for $p \leq .05$ (χ^2 for $p \leq .05 \geq 3.84$ (1df)). Subject names printed in bold indicate a 'strong trend.'

In Table 5.11 five strong trends are perceptible:

- Bilingual speakers tend to use more repetitions of personal pronouns when speaking English than when speaking German;

- bilingual speakers tend to use more repetitions of pronouns and conjugated verb forms or verbal phrases when speaking English than when speaking German;
- bilingual speakers tend to use more repetitions of prepositions when speaking English than when speaking German;
- bilingual speakers tend to use more repetitions of definite articles when speaking German than when speaking English; and
- bilingual speakers tend to use more repetitions of demonstrative pronouns when speaking German than when speaking English.

It is noteworthy that regarding false starts there are almost no statistically significant differences in their occurrences in both languages. However, two exceptions are observed. June produces significantly more false starts with personal pronouns in her English conversations and Lauren produces significantly more false starts with personal pronouns in her German conversations.

Table 5.11 also shows that regarding the total number of these ten self-repair types there are more occurrences in the English data compared to the German data. To verify these language differences, the raw data of all sixteen conversations as presented in Table 5.12 was consulted, and it became clear that indeed more repetitions overall and more repetitions of personal pronouns, of pronoun-verb combinations, and of prepositions are used in the English conversations than in the German conversations. However, Table 5.12 does not confirm that more definite articles are repeated in the German talk than in the English talk. Only one repetition

type, namely demonstrative pronouns, is more frequently employed in the German data compared to the English data. The reasons for these language differences have to be linguistically motivated and reflect differences in the language structure of German and English, as will be shown below.

Table 5.12: Selected self-repairs

Self-repair	**English**	**German**	χ^2
All self-repairs	2900	3703	64.7*
All fillers	1728	2589	119.8*
All repetitions	749	622	11.8*
RPE	178	107	17.7*
RPV	119	52	26.3*
RP	95	69	4.1*
RDA	64	63	0.01
RDE	23	62	17.9*

Legend: An asterisk indicates a significant chi-square value (χ^2 for $p \leq .05 \geq 3.84$ (1df)).

The most obvious difference in the usage of repetitions in both languages is the repetition of pronouns and conjugated verb forms or verbal phrases. Therefore this repetition type must be more closely examined. English and German repetitions of pronoun-verb combinations are used in a similar way. They occur with or without lexical item/s or quasi-lexical item/s between the first and second utterance of the

pronoun-verb combination. The usage of pronouns in the combination is comparable in English and German as well. However, a difference can be ascertained for the conjugated verb employed. Table 5.13 shows which verbs are used as part of the pronoun-verb repetitions. The table thus makes it clear that the only significant difference between both languages lies in the usage of the verb 'to be' or 'sein.' In the English data there are almost three times as many combinations that utilize 'to be' as a main verb than there are combinations that use 'sein' as a main verb in the German data.

Table 5.13: Repetitions of pronouns and conjugated verb forms or verbal phrases

The verb in RPE	**English**	**German**	χ^2
Auxiliaries	14	11	.4
Modal auxiliaries	11	7	.9
To be/sein as main verb	72	25	22.8*
To have/haben as main verb	9	4	1.9
Other verbs	13	5	3.5
Total	119	52	26.3*

Legend: An asterisk indicates a significant chi-square value (χ^2 for $p \leq .05 \geq 3.84$ (1df)).

A few English and German examples of repetitions of pronouns and the verb 'to be' or 'sein' as a main verb follow.

(273) C3 SV42 but it's it's really a lot of fun [...]

(274) C9 WE127 well ... well it's it's like-

(275) C12 SU161 no I'm I'm just curious [...]

(276) C16 LA31 that's a that's a really good idea [...]

(277) C5 JU175 das ist so das ist soviel HEKTischer [...]

that is so that is much more hectic [...]

(278) C11 SV67 die sind ganz die sind ganz ähnlich

these are very these are very similar

A close look at these and many more examples of those particular repetitions of pronouns and conjugated verb forms or verbal phrases reveals that most English examples – 66 out of 72 to be precise – are made up of a pronoun plus a contracted verb form, such as 'it's,' 'I'm,' 'that's,' and the like. In German, however, no contracted forms of pronouns and verbs are grammatically possible. Consequently, no such repetitions can occur in the German language and therefore in the German data.

Table 5.14 shows the distribution of contracted and non-contracted verb forms in repeated pronoun-verb combinations; it reveals that the number of non-contracted verb forms in repetitions of pronoun-verb combinations is virtually identical in the two languages. Hence, the reason why there are more repeated pronoun-verb combinations of all kinds in English than in German lies in the fact that the German language does not allow the usage of contracted forms of pronoun-verb combinations.

Table 5.14: Distribution of contracted and non-contracted verb forms in the repetitions of pronoun-verb combinations

The verb in RPE	**English**	**German**	χ^2
Contracted verbs in RPE	66	0	66.0*
Non-contracted verbs in RPE	53	52	.01
Total	119	52	26.3*

Legend: An asterisk indicates a significant chi-square value (χ^2 for $p \leq .05 \geq 3.84$ (1df)).

The question remains as to why the contracted verb 'to be' used as a main verb is so often part of a repeated pronoun-verb combination. In other words: Does this particular structure lend itself more readily to repetition than a non-contracted form, and if so why? It would seem to be easier, more effortless and more economical to repeat, for example, 'it's' and 'that's' than 'it is' and 'that is' or also 'es ist' and 'das ist.' However, if the purpose of repeating words or phrases is to delay the production of the next item and thus gain time for additional verbal planning it would not make sense to repeat forms that are economical.

Contracted forms are not only more quickly and more effortlessly repeated than the non-contracted forms, but they also seem to form an inseparable unit because there are no occurrences of repeated pronouns in which only the second and thus the repeated pronoun is linked to a contracted verb. In other words, no 'that

that's,' 'I I've,' 'it it's' examples, and the like are found in the entire corpus. There are, however, examples of 'das das ist' or 'ich ich hab' in the German data.[4]

Fox et al. (1996) have shown that recycling tends to start at the beginning of units. This is evident in the corpus of the present study as well. More pronouns and articles than verbs or nouns are repeated,[5] for instance. The latter are usually not found at the beginning of units whereas the former are.

Hence, if we consider that recycling tends to start at the beginning of a unit, such as a phrase, and that pronouns and contracted verb forms are inseparable, it becomes clear why there many more repeated pronoun-verb combinations in the English data than in the German data despite the fact that they are more economical than the repetitions of 'that is' or 'das ist.' The pronoun stands at the beginning of a unit and cannot be separated from the contracted verb form. Thus, if the necessity to recycle occurs in the unit in which they - as an entity - are positioned at the beginning of the unit, both *must* be recycled together.

The repetitions of pronoun-contracted verb combinations are, however, not more economical than the repetition of personal or demonstrative pronouns. The repetitions of pronouns and contracted verb forms in the English language would not correspond to the repetition of pronoun-verb combinations in the German language but to the repetitions of pronouns alone – demonstrative pronouns or personal

[4] See for instance examples (27), (77), (124), and (162) in this chapter for 'das das ist' and examples (3), (40), (59), and (178) in this chapter for 'ich ich hab.'

[5] Note that repeated verbs or nouns are not part of the ten most frequently used repetition types, but personal pronouns, demonstrative pronouns, and articles are.

pronouns – for these are easily separated from the following conjugated verb form. Consequently, it could be expected that there are more repetitions of demonstrative pronouns and personal pronouns in the German conversations than in the English talk.

This expectation is met with regards to demonstrative pronouns, and that explains why there are more repeated demonstratives in the German corpus than in the English data. However, the reverse is true for personal pronouns. With the exception of June, who recycles no personal pronouns in English, and Lauren, Werner, and Henry who repeat personal pronouns approximately as often in English as in German, the remaining subjects – two native speakers of German and two native speakers of English - repeat personal pronouns significantly more often in English than in German. The qualitative analysis, however, does not reveal any difference in the usage of repeated personal pronouns in both languages. This unexpected high number of recycled English personal pronouns cannot readily be explained.

Table 5.12 reveals not only that, in general, more repetitions occur in the English corpus but that significantly more self-repairs and significantly more fillers are used in the German data. One reason for this difference is certainly the fact that in this study five speakers are native speakers of English as opposed to three speakers that are native speakers of German, and for the non-native speakers the

necessity to use fillers is observed more frequently.[6] In fact, the native English speakers use a total of 1,913 fillers (or 382.6 per person) when speaking German compared to a total of 489 fillers (or 163 per person) employed by native speakers of German in the German conversations. This also suggests that it is likely that speakers, in general, and non-native speakers, in particular, rather use fillers than repetitions when the need to delay the production of the next item/s arises. This could thus explain why fewer personal pronouns than expected are recycled in German.

Finally it remains to be discussed why there are more repeated prepositions in the English data than in the German data. What has just tentatively been concluded for the repetitions of personal pronouns could also be concluded for the recycling of prepositions. On the other hand, there is also a structural difference between the English and German language regarding prepositions. There are more prepositions used in the English language than in the German language.

To validate that there are more prepositions employed in English than in German the following observations are offered: As the case system of English decayed, two devices became more widely used to replace it: word order and prepositions (R. d'Alquen, personal communication). In English, the dative and genitive cases are usually marked by the prepositions 'to,' 'for,' and 'of' whereas in

[6] See also results in Chapter Four.

German, no prepositions are needed to render the dative and genitive object cases.[7] Consider the following examples.[8]

Gib es dem Kind	Give it to the child
Das gehört mir	That belongs to me
Mir egal	All the same to me
Seinem Herrn gehorsam	Obedient to his master
Der Aufgabe gewachsen	Equal to the task
Das fällt mir leicht	That is easy for me
Unbekannten Ursprungs	Of unknown origin
Der Gipfel des Berges	The peak of the mountain

Of course, the examples cited say nothing about the frequency of their and similar uses in written or spoken discourse and, hence, cannot prove whether prepositions are more often used in English than in German. However, a count of the prepositions used in the data pool under consideration is more revealing. In fact, in the English corpus, which consists of 31,333 words, 2,676 prepositions are used, among which there are 95 repeated on their own and 21 prepositions repeated as part of a recycled prepositional phrase. In the German corpus, which is of comparable size and consists of 31,028 words, 1,841 prepositions were employed, among which 69 were recycled on their own and 20 were repeated as part of a recycled prepositional phrase. 825

[7] It has to be noted, however, that in German conversations the genitive is often replaced by 'von' plus dative.

[8] I wish to thank Richard d'Alquen who gave me the listed examples. They are rendered with his permission.

more prepositions occurred in the English data than in the German data. If prepositions are more often used in English than in German, it is because there are more opportunities and therefore a greater likelihood to repeat them. It is thus not surprising that more prepositions are recycled in English than in German. Moreover, when considering the ratio of the repetitions of prepositions over the total number of prepositions used, the same result is obtained for English and German, namely 0.036 for English compared to 0.037 for German.

In sum, it must be stressed that the structure of a particular language appears to shape the repair strategies of language users because it creates opportunities for recycling. These opportunities are not always respected by second language users who tend to use more fillers than other self-repair strategies when the necessity to 'play for time' arises.

An additional instrument[9] to measure a person's extent of bilingual proficiency could thus be the usage of repetitions. If a person repeats the same structures in the same way as native speakers do this could be an indicator of a highly proficient bilingual speaker.

[9] See also results in Chapter Four.

5.10.2 Effects of the interaction partner's gender on repetitions and false starts

For all participants in this study it has been observed that their behavior regarding repetitions and false starts changes to a minor degree, depending on the gender of their interaction partner.

What has been remarked for fillers in Chapter Four[10] holds true for repetitions and false starts as well, namely that the observed effects of the gender of the addressee could be due to two different reasons - either using different repair strategies when speaking to an opposite-gender addressee as compared to speaking with a same-gender partner, or using different repair strategies depending on whether the conversationalist is speaking with a woman or a man. To be able to distinguish between these two reasons, the effects are once again presented in two different tables. Table 5.15 displays the gender effects based on whether the subjects speak to a same-gender addressee or to an opposite-gender addressee. Table 5.16 shows the gender effects revealed when the participants speak to a woman or to a man. The same criteria were adopted to determine a 'strong trend' as for Table 4.10 and 5.10.

In Table 5.15 no trend is evident. The only effect of the gender of the interaction partner that can be observed for several subjects is not generalizeable at all. Three participants – Lauren, Henry, and Sven – recycle conjunctions significantly more often when speaking to a same-gender partner than when speaking

[10] See page 198.

to an opposite-gender addressee. For all three of them it is the same-gender German conversation in which they utilize this particular repetition unusually often.

Table 5.15: Significantly higher frequencies of repetitions and false starts in conversations with a same-gender partner compared to conversations with an opposite-gender partner

Fillers	**Talking to same-gender partner**	**Talking to opposite-gender partner**
RPE	Gordon, Henry	June
RC	Lauren, Henry, Sven	Werner
SPV	June, Gordon	Henry
RPV	Gordon, Sven	Henry
RP	Lauren, June,	
RDA	Henry	June
RDE		Gordon, Isabel
SPE	Werner	June,
RIA		Lauren
SC	Gordon, Henry	Sue, Werner
Total	Gordon, Henry	

Legend: Subject names appearing indicate that this particular subject uses the feature in question with a very high frequency that is statistically significant for $p \leq .05$ (χ^2 for $p \leq .05 \geq 3.84$ (1df)).

Table 5.16 does not reveal a trend, either. This time, two effects that are not generalizeable, however, are found. Three participants – June, Gordon, and Henry –

recycle personal pronouns significantly more often when speaking to a man than when speaking to a woman. For all three of them it is the same-gender German conversation in which they utilize this particular repetition unusually often. Sue, Gordon, and Henry produce false starts with conjunctions significantly more often when talking to a man than when talking to a woman.

Table 5.16: Significantly higher frequencies of repetitions and false starts in conversations with a woman compared to conversations with a man

Fillers	**Talking to women**	**Talking to men**
RPE		June, Gordon, Henry
RC	Lauren, Werner	Henry, Sven
SPV	June, Henry	Gordon
RPV	Henry	Gordon, Sven
RP	Lauren, June	
RDA	Gordon	June, Henry
RDE	Gordon	Isabel
SPE		June, Werner
RIA		Lauren
SC	Werner	Sue, Gordon, Henry
Total		Gordon, Henry

Legend: Subject names appearing indicate that this particular subject uses the feature in question with a very high frequency that is statistically significant for $p \leq .05$ (χ^2 for $p \leq .05 \geq 3.84$ (1df)).

Gordon and Henry, as well as Sue were also among the subjects that used fillers, particularly quasi-lexical fillers more often when interacting with a man than when interacting with a woman. In addition, Gordon and Henry also employ more of the total number of the ten most frequently used self-repairs when interacting with a man as compared to when interacting with a woman. While none of the eight subjects display a similar consistent behavior towards women, these two men utilize more self-repairs when talking to men and fewer self-repairs when talking to women. So their conversational style with regards to self-repair strategies seems certainly strongly affected by the gender of the addressee.

The conversational style of the remaining six participants also changes depending on the gender of their addressee, but their changes are less pronounced.

The four subjects who create somewhat of a pattern by using more self-repairs of various types in various degrees with a man than with a woman, namely Gordon, Henry, June, and Sue, have other characteristics in common. They are native speakers of English, and the men to whom they are talking are native speakers of German, namely Werner and Sven. Henry and June talk to Werner whereas Gordon and Sue speak to Sven. It is possible that these speakers do not react to the gender of the addressee, but to another factor or to a variety of other factors such as the first language of the addressee, his personality, his self-repair strategies, his conversational style, his age, or any other factor that Werner and Sven might or might not have in common.

CHAPTER SIX

CONCLUSION

6.1 Summary and interpretation of significant findings

This study has analyzed the conversational self-repair strategies of four female and four male English-German bilingual speakers in a qualitative and quantitative manner. The qualitative analysis has revealed individual differences in the choice of lexical fillers, but not in the usage of these or other fillers, namely lengthening and quasi-lexical fillers. Lexical fillers differ, of course, in both languages in terms of the actual fillers employed; however, both languages provide lexical fillers for the same purposes, and the subjects made use of them in an appropriate and comparable manner in English and German. They used lexical fillers to fill gaps in the conversation and to meet simultaneously interactional, social, and linguistic requirements, such as engaging the addressee, yielding the floor, asking for feedback, emphasizing the content of an utterance, making it sound more friendly, and the like.

Fillers were employed by all participants of both genders and in both languages in all three positions – at the beginning, the middle, or the end of turns, turn-constructional units, clauses, or phrases. Fillers were often used in combination with other fillers or other self-repair strategies, thus confirming Shriberg's (1994) claim that self-repairs tend to co-occur. Although all participants used fillers in a

similar way in English and German with either a female or a male interlocutor, most of them used more fillers in their non-native language, as the quantitative analysis shows.

The qualitative analysis of the ten most frequent repetitions and false starts showed that all subjects used repetitions and produced false starts in the same manner in both languages and with addressees of both genders. However, it was the quantity of usage of these self-repair strategies that differed, depending mainly on the language employed.

The quantitative analysis of fillers, repetitions, and false starts revealed a number of trends. The participants in this study tended:

- to use more lexical fillers in their non-native language than in their native language;
- to use a particular lexical filler, a so-called idiosyncratic filler, with unusually high frequency in their non-native language;
- to use more quasi-lexical fillers in their non-native language than in their native language;
- to use more fillers overall in their non-native language than in their native language;
- to use more miscellaneous fillers when speaking German than when speaking English;

- to use more 'I mean'-class fillers when speaking English than when speaking German;
- to use more 'you know'-class fillers in English than in German;
- to use more repetitions of personal pronouns when speaking English than when speaking German;
- to use more repetitions of pronouns and conjugated verb forms or verbal phrases when speaking English than when speaking German;
- to use more repetitions of prepositions when speaking English than when speaking German;
- to use more repetitions of demonstrative pronouns when speaking German than when speaking English;
- to use more quasi-lexical fillers when talking to a man than when talking to a woman;
- to use more fillers when talking to a man than when talking to a woman;
- to use more 'you know' fillers when talking to a woman than when talking to a man; and
- three of the four male participants used significantly more quasi-lexical fillers than lexical fillers or lengthening, whereas three out of the four female participants used significantly more lexical fillers and lengthening than quasi-lexical fillers.

The fact that more fillers are employed in the L2 conversations compared to the L1 conversations shows that hesitations and gaps occur more often in the non-native language; this means that the need to search for the next lexical item(s) or for a linguistic construction arises more often in the non-native language. The subjects thus seem to display a lower degree of automaticity in the usage of the L2 than in the production of their native language (cf. Kormos, 1999). But this interpretation is not in conflict with Temple (1992) who found that fillers are used more frequently in the speech of native speakers compared to beginning L2 learners who often seem to leave hesitation pauses and other gaps unfilled. It can be argued that advanced learners and speakers of a second language – as opposed to beginners – are not helpless or passive when the need to delay the production of the next lexical item(s) arises, but they signal to the addressee through the usage of fillers that they are searching for lexical items or are otherwise planning the continuation of their utterance. In doing so, they produce more fillers than native speakers and far more fillers than beginning second language learners. The usage of fillers thus increases in more advanced learners compared to beginners. It seems to decrease again when the speaker's performance and the automaticity of her or his speech production becomes more native-like since the most proficient subjects in this study – those with a near-native command of both languages – use approximately the same number of fillers in English and German.

The finding that miscellaneous fillers, 'I mean'-class fillers, and 'you know'-class fillers are employed differently in both languages can be explained by the fact that although there do exist equivalents in both languages for all of them, an analysis of the occurrence of word-by-word translations is misleading because they are not necessarily equivalent in meaning. There are semantic and pragmatic differences between these fillers and they should be considered 'false friends.' 'You know' and 'weißt du' or 'I mean' and 'ich mein' are not the same fillers in the sense that the same conversational situation requires them. For example, the use of 'I mean' in English would require the use of 'ich mein' in German, but depending on its position, 'I mean' may, for instance be rendered as 'also' in German. Furthermore, for some fillers, such as 'also' or 'na,' no obvious one-to-one translation exists. The semantic spaces of a filler and its equivalent in the other language are not coterminous although overlaps do exist. Sometimes 'also' can be rendered by 'well' or 'so,' but not in all positions. The data thus show that the classes of fillers chosen for the analysis are not the same or equivalent in both languages. The differences in usage in English and German are then due to the research design, not to differences in the two languages or to the conversational style adopted by the subjects depending on the language spoken. Hence, a modification of the research design would be necessary to better analyze the usage of lexical fillers in two languages.[1]

[1] See pages 325-6.

The fact that more personal pronouns, more combinations of personal pronouns and conjugated verb forms, and more prepositions were repeated in the English conversations than in the German talk, as well as the finding that more demonstrative pronouns were recycled in the German data than in the English corpus, were mainly explained by differences in the structure of both languages. It was observed that a majority of the repeated English pronoun-verb combinations consisted of a pronoun and a contracted verb. In German, contracted forms of pronoun-verb combinations are grammatically impossible. It was further noted that a pronoun and a contracted verb form a unit in which no element can be singled out when it is being repeated. It was argued that the tendency for recycling to start at the beginning of units and the fact that the pronoun-contracted verb combination is an inseparable unit accounts for the higher number of repeated pronoun-verb combinations in the English corpus. It was shown that in the German data a repeated pronoun, often a repeated demonstrative pronoun, would be found in the same case, and that also explained why more repeated demonstrative pronouns were found in the German dialogues than in the English conversations.

For the same reason, it could be expected that more personal pronouns were recycled in the German data. However, the opposite was true; more personal pronouns were repeated in the English data, and a satisfactory reason could not be given for that outcome. Maybe the fact that more repetitions in general occurred in the English corpus, but more fillers were produced in the German conversations

offers an explanation. Since both repetitions and fillers have a similar function, namely to allow the speaker to gain time without losing the floor while searching for a word or construction, the participants in this study might have used German fillers in conversational situations in which they would have used recycling instead if they had been speaking English. It was further argued that the fact that more participants were native speakers of English than native speakers of German could explain the aforementioned discrepancy. It was concluded that it is likely that speakers, in general, and L2 speakers, in particular, have a preference to employ fillers rather than repetitions when they need to signal to their addressee that they are not about to yield the floor when hesitating. Furthermore, this may suggest that the choice and usage of a repetition strategy is a more complex hesitation strategy than the usage of fillers is and it would be worthwhile investigating which strategy is acquired first by children and by second language learners.

Another, very likely reason why fewer personal pronouns were repeated in the German conversations compared to the English dialogues could have to do with the fact that German is a V2 language, i.e., a language that keeps the verb in the second position such that the verb can be followed by the pronominal subject, while in English the pronominal subject always precedes the verb.[2] If the need to delay the production of the verb or the words following the verb arises in English conversations the personal pronoun preceding the verb or the pronoun-verb

[2] I thank Gary D. Prideaux for drawing my attention to this fact.

combination is recycled. However, if the same need arises in a German conversation a personal pronoun will only be repeated if it precedes the verb, but not if it follows the verb. In the latter case, whatever precedes the verb will be repeated, or fillers will be used to delay the production of the verb.

The larger number of repeated English prepositions corresponded to a larger number of prepositions used in the English conversations. Due to the decay of the English case system, prepositions are used to mark the dative or genitive case in English where the German language usually uses no preposition. Hence, more prepositions are employed in English than in German. The difference in the frequency of repeated prepositions in both languages is thus due to a structural difference in English and German, as was the case for repeated demonstratives and pronoun-verb combinations. It has also been found that the ratio of repeated prepositions was the same in both languages, which suggests that this particular self-repair strategy – like so many others – is used in a very orderly manner. This is thus another confirmation for the view that self-repair is a well-organized phenomenon.

The finding that more fillers, in general, and more quasi-lexical fillers, in particular, were used when the addressee was a man than when the interlocutor was a woman, and that more 'you know' fillers were used with women than with men is rather unexpected. Equally unexpected is the fact that most participating men used more quasi-lexical fillers than other fillers while most women displayed the reverse pattern. This also means that men use significantly more quasi-lexical fillers than

women, and that women employ significantly more lexical fillers than men. The total number of self-repairs employed is affected, too; men make use of significantly more self-repairs than women do (cf. Rieger, 1999).

Many studies have explored gender differences and language usage in the past twenty-five years (cf. Freed, 1999) and they have often yielded contradictory results. These contradictions are in part, but not exclusively, due to differences in the design of these studies. 'You know' is one of the phenomena examined in this project and in many others (cf. Holmes, 1986; Coates, 1993; Freed & Greenwood, 1996; Dixon & Foster, 1997) which has generated inconsistent results. While Lakoff (cited in Holmes, 1986) claims that women use 'you know' more often than men, this study and Holmes, as well as Freed and Greenwood, found that this is not the case. On the other hand, Holmes as well as Freed and Greenwood maintain that both genders use it more often with a same-gender interlocutor than with an opposite-gender addressee, while this study as well as Dixon and Foster contradict that finding. The latter report that men employ 'you know' in a confident manner (as opposed to an "unconfident" manner) more often when talking to women than women do when talking to women or men. This study, in contrast, found that both men and women use 'you know' more often with women than with men; it also found that women and men use approximately the same number of 'you know'-fillers (see also Rieger, 1999).

Five studies – carried out at different times, on different continents, in different settings, under different conditions, with different speech events and different subjects, the only commonality being the fact that women and men engaged in English talk– have revealed inconsistent results. Is it surprising that the findings of these studies are different and even contradictory? Yes and no. It is surprising to those researchers who assume that sex or gender is a non-linguistic factor that has a *uniform* effect on language usage. It is surprising to researchers like Coates (1993, p. 139) who are convinced "that women and men do pursue different interactive styles." Some also declare that most gender differences in language usage and conversational style are gender-preferential rather than gender-exclusive, which is a diminution, but nonetheless an affirmation of the difference theory, and so they too stress the differences in their work.

The contradictory findings come as no surprise to those researchers who are not convinced that women and men employ different conversational styles and who believe that gender is only one factor that might influence language usage, and not necessarily in a uniform manner. Many more factors influence language production and they all interact with each other in complex ways, which makes it impossible to isolate just one and to designate it as the one responsible for a particular phenomenon of language production. "Gender, like ethnicity and class and indeed age, is a social construction and may enter into any of a variety of interactions with other social phenomena," writes Eckert (1989, p. 253), and Branigan, Lickley, and McKelvie

(1999), having described the interaction between two non-linguistic factors, one being gender, agree.

Freed (1999) goes one step further in investigating why the general public and academia are convinced of and interested in the existence of gender differences in language usage, although recent research on gender differences and language does not confirm these beliefs (cf. Eckert, 1989; Eckert & McConnell-Ginet, 1992; Hall & Bucholtz, 1995; Bergvall, Bing, & Freed, 1996; Johnson & Meinhof, 1997; Livia & Hall, 1997; Wodak, 1997; Bucholtz, Liang & Sutton, 1999; Freed 1999). She concludes that the emphasis on gendered talk could be interpreted as an attempt to "maintain gendered behavior" (Freed, 1999, p. 12), as Cameron (1997) had suggested earlier, because although the "two-gender system is still enforced [...] the edges are blurring" (Freed, 1999, p. 13) and there "are signs of gender destabilization all around us" (Freed, 1999, p. 12), which create discomfort and thus the wish to counteract these perceived developments.

Although the previous discussion does not directly explain the findings of this study, it reminds us to be aware of research motives and research design. This study has isolated – among other factors – gender as a variable of speaker and addressee; however, it has not simultaneously specified factors such as age, status, the nature of the relationship to the addressee, the topic of conversation, and others which have all been shown to influence language production (Freed, 1999) and which may, in addition, interact with each other (Eckert, 1989; Branigan et al.,

1999). What has been described as a gender difference or as a different reaction to the gender of the interlocutor may in fact be an age difference, a status difference, or a reaction to the fact that the addressee occupies a higher rank or has more power. After all, there were large age differences among the subjects, some were students, others were professors; in one instance, the addressee was the subject's professor; some were friends, and others were almost strangers. These are only a few factors that may have influenced the conversational style and have interacted with other factors, such as the gender of the speaker and/or addressee.

This researcher is thus reluctant to speculate about the reasons for the 'gender differences' obtained in the use of self-repair strategies, which may in fact not be due to gender. However, it is necessary to relate and compare these findings to those of other studies in self-repair strategies and gender, as described in Chapter Two. Shriberg (1994) found that men use more quasi-lexical fillers than women, and according to Bortfeld, Leon, Bloom, Schober, and Brennan (1999), men use more self-repairs, especially more quasi-lexical fillers than women, Lickley (1994) reports that men produce more self-repairs than women do, while Branigan et al. (1999) assert that women use more self-repairs than men when they cannot see their addressee. The latter claim can neither be affirmed nor refuted by this study, since its subjects were able to see each other at all times. All other results, however, are confirmed by the present research. If the gender of the speaker is indeed the main factor responsible for this variation in the usage of fillers and other self-repairs, a

difference in the conversational style of women and men has been found by these studies, including the present one. In any case, further research is required not only to confirm these findings, but also to explore possible reasons for such a gender-preferential variance.

Unfortunately, no gender-preferential differences have been obtained with regard to the gender of the interlocutor in other studies, which could confirm the differences found by the present study. This may be because gender studies have first and foremost concentrated on the gender of the speaker (e.g., Lickley, 1994; Shriberg, 1994; Bortfeld et al., 1999). In addition, it might be the case that the aforementioned differences are not due to the gender of the addressee, but to her or his age, status, first language, or any other factor. On the other hand, it is also possible that the influencing factor was indeed the gender of the interaction partner. A different research design could provide more control over some additional social factors, such as age, status, and the nature of the relationship with the interlocutor.

Given these uncertainties, it is not a straightforward task to accept or reject the hypotheses described in Chapter One. The first hypothesis – which states that a bilingual speaker organizes self-repair in conversations according to the syntactic structure of the language in question – is confirmed by the findings that more prepositions, more personal pronouns, and more pronoun-verb combinations were repeated in English and more demonstrative pronouns were recycled in German. The subjects employed self-repair strategies in accordance with the language they spoke,

and in doing so they changed their conversational style. However, it has also been shown that the participants employed self-repair strategies that reflected the fact that they were speaking a second language. Their conversational style was thus not only influenced and changed by the language in question, but also by the fact that they were speaking a second language. The present study and previous findings on second language self-repair thus show that conversational style depends, among other factors, on linguistic, metalinguistic, and conversational knowledge and awareness, as well as the level of automaticity in the use of the language in question. This is mainly supported by the fact that not all speakers displayed the same behavior, and their patterns of self-repair strategies seemed to depend on the aforementioned knowledge and skills.

The second or non-dominant language of a bilingual may be regarded as an interlanguage; the usage of self-repair strategies thus promises to be a conversational feature worth investigating in the field of interlanguage pragmatics.[3] Such investigations would not only provide further insight into the development of self-repair strategies, but could also help verify the suggestion put forward that the skillful and native-like usage of self-repair strategies in more than one language is one indicator of accomplished bilingualism.[4]

---

[3] See pages 328.

[4] See pages 197 and 294.

The second hypothesis posited that women and men do not use self-repair strategies differently, no matter whether they are talking to same-gender partners or opposite-gender partners. The findings of this study and previous research seem to falsify this hypothesis since gender differences of both the speaker and the addressee were observed, although no reasons for these gendered variances could be given, and moreover their validity has been questioned. However, at this time at least, the hypothesis can be rejected, and future studies will have to prove or disprove its veracity.

The third hypothesis stated that each speaker has individual self-repair strategies that help shape her or his conversational style which are neither affected by a particular language nor by the gender of an interaction partner. This hypothesis can be partially confirmed, since the total number of self-repairs produced is a highly individual phenomenon, although for most subjects it was higher, but proportionally higher in the second language: The participants who used a high number of self-repair strategies in their L1 used a correspondingly higher number in their L2. The choice of lexical fillers also seems to be an individual strategy since not every subject used the same fillers. Moreover, one strategy discovered in the non-native language conversations, and thus influenced by language, proved so unique that it was given the name 'idiosyncratic.' It involved the unusually frequent, almost exclusive, usage of a particular lexical filler in the second language conversation.

Furthermore, it has to be noted that almost every subject had individual self-repair strategies that depend on the language spoken and/or the gender, (or any other factor) of the interlocutor. June, for instance, was the only subject to repeat more personal pronouns in German, while Gordon repeated more conjunctions in English, and Lauren recycled more prepositions in German; Werner repeated more indefinite articles in English, to name just a few highly individual self-repair strategies.

Another issue is the impact which language, gender, and individuality have on the usage of different classes of self-repair strategies. The self-repair strategies least affected by language, gender, or individuality were false starts. They were produced in a rather uniform and similar manner and quantity in English and German, by women and men, with female and male interlocutors. It is also noteworthy that among those strategies, seemingly most affected by the gender of either speaker or addressee were the fillers, but not repetitions or false starts. In addition, it was observed that four participants were more inclined to use more self-repairs of various types to various degrees with their male interaction partner than with their female interlocutor. Since these four were all native speakers of English speaking to male German natives, this may be a characteristic of English bilinguals when speaking to a male native speaker of their second language and may thus be the consequence of a possible interaction of intervening variables. It is, however, just as likely that they were reacting to other factors or interactions thereof that their male addressees had in common.

Table 6.1: Overview of hypotheses and their evaluation

Hypothesis	Evaluation
1) A bilingual speaker organizes self-repair according to the syntactic structure of the language used.	supported
2) Women and men do not use self-repair strategies differently, no matter whether they are talking to same-gender partners or opposite-gender partners.	refuted
3) Each speaker has individual self-repair strategies which are not affected by a particular language or the gender of an interaction partner.	partially supported

In short, it may be concluded that conversational style with respect to self-repair strategies changes depending on the language spoken, and that it changes depending on the gender of the speaker and the gender of the interlocutor. Moreover, some individual strategies observed in self-repairs were not affected by these factors, but others were. An additional important variable is the level of accomplishment in the language spoken.

The findings of this study have implications for the theory of discourse analysis. Since it has been shown that linguistic and non-linguistic factors play a role in the usage and production of discourse features such as self-repair strategies, discourse-analytic theories have to allow for variations in the production and usage

of these features depending on a variety of factors. Linguistic, cognitive, social, cultural, and individual factors play influential roles in the production of discourse features and therefore in shaping conversational structure. Accordingly, not only linguistic but all influential devices have to be taken into account in a theory of discourse.

The findings presented here have also implications for the study of discourse analysis in general and discourse features in particular. As is the case for self-repair, most discourse features are studied in very few languages, such as English, Japanese, German, French, and Spanish. However, this investigation has shown that language shapes conversational features and therefore we need to study these phenomena in as many languages as possible. Furthermore, linguistic proficiency has been said to affect the usage of self-repair. Consequently, linguistic proficiency can be expected to affect the usage of other discourse features as well, and it is thus important to study all discourse features as they are produced by native and non-native speakers. Finally, the gender of speaker and addressee does also play a role in the production of discourse features, and researchers should differentiate between women and men's production of these phenomena when they are talking to women or men.

6.2 Limitations of the study

This is an exploratory and preliminary study of the conversational style of bilingual speakers and its findings are subject to several limitations. The greatest

limitation is the relatively small number of subjects and the composition of the sample. All findings – whether due to the language used, English or German, L1 or L2, or the gender of the addressee or speaker – are the results of observations of only eight speakers, and therefore have to be regarded as tentatively validated hypotheses remaining to be investigated in larger studies with more participants. Yet a very high number of tokens of self-repairs did allow certain conclusions and provided new insights into the organization of self-repair, in general, and self-repair strategies of bilinguals, in particular.

Further limitations of the present study are to be found in the research design chosen. It has already been mentioned that the subcategories of lexical fillers were not identical in English and German, which did not pose a problem for the qualitative analysis. However, the quantitative results are misleading, suggesting language differences where there are none. Furthermore, the findings regarding gendered discourse behavior remain questionable not only because of the small number of subjects, but also because many potentially influencing and interacting factors, such as age, status, and others, were not controlled.

On the other hand, the present study is the first of its kind, and its most important accomplishment may be considered the development of an adequate methodology to analyze the conversational and linguistic skills of bilingual speakers in two languages. The use of both qualitative and quantitative analyses within the framework of interactional sociolinguistics has proven highly effective for the

described purpose. Studies of this nature help bridge the gap between discourse analysis and interlanguage pragmatics, as well as the gap between monolingual and cross-linguistic discourse studies. This is a necessary undertaking since individual variance is rarely detected and accounted for in the aforementioned disciplines. Studies in the language usage and discourse behavior of bilinguals in two languages which go beyond codeswitching will give us further insights which can contribute to a better understanding of the regularities governing language acquisition, language usage, and bilingualism.

6.3 Implications for the second language classroom

The first question is whether findings on self-repair strategies have or should have implications for the second language[5] classroom; in other words, should we be aware of our students' self-repair strategies and teach appropriate self-repair strategies at all? Some will answer "no." They believe that self-repairs, in general, and fillers, in particular, are flaws to be eradicated. In fact, the researcher was told, while giving a presentation on this topic, that people take classes in rhetoric in order to eradicate these "ugly disfluencies" from their speech, and "you want to teach them in the foreign language classroom!" This widespread opinion is based on the idea that written language, which does not display any self-repair, is somehow "better" than the spoken language. Too many quasi-lexical fillers and false starts in one's

[5] In this chapter, the term 'second language' refers to a second language *and* to a foreign language.

speech apparently convey the image of an ill-educated, disorganized person. But the goal of such instruction would not be to teach students how to stop and restart their utterances or how to fill them with *uhs* and *uhms*. The goal would be to help the learners recognize and understand self-repair strategies in the speech of native speakers and to demonstrate useful techniques to signal an addressee that they are searching for a word or construction or are otherwise planning their utterance when they hesitate. In other words, the author proposes a two-stage process. The first step would be to create awareness about appropriate self-repair strategies among the second language learners. The second stage consists of the teaching, training, and usage of self-repair strategies in the target language in classroom interactions.

Four reasons leave no doubt that self-repair strategies are a valid and important skill to be acquired in the second language classroom.

1. Research shows that self-repair is a very orderly phenomenon which is part of everyone's speech. It is not a chaotic aspect of conversation which an educated person knows how to purge from her or his conversations.
2. Cross-linguistic studies, like the present one, demonstrate that self-repair is, at least in part, organized according to the morpho-syntactic structure of a language.
3. L2 studies show that self-repair strategies are not always understood as self-repairs and that in terms of production process and product, the L2 self-repair strategies differ from native-language strategies.

4. L2 communication can be problematic, particularly in the early stages of language learning, because of limited linguistic knowledge and conversational skills.

Since self-repair is an orderly, rule-governed phenomenon that reflects the syntactic organization of a language, it is not only 'worth' being taught, but even necessary at least in the framework of communicative language learning and teaching. Second language learners cannot be familiar with these rules unless they are taught or unless the learners already have very good discourse skills – which are the results of a substantial amount of experience with communicative situations in the second language outside the classroom.

One of the goals of second language learning is the eventual mastery of both the *spoken* and written target language in authentic communicative acts and situations. However, many current textbooks and instructions with their relatively strong emphasis on the written language make it difficult for second language learners to understand the authentic spoken target language because – in addition to presenting difficulties in syntax, morphology, and phonology – it makes use of self-repair. Introducing the self-repair strategies of native speakers in the second language classroom familiarizes learners with them so that they will be able to recognize and understand their meaning in conversations with native speakers.

Especially in the early stages of second language learning, communication in the target language is a difficult task. The linguistic, metalinguistic, and

conversational knowledge is almost non-existent, and the level of automaticity is very low. Therefore the need to search for a word or structure occurs quite frequently; consequently, beginning second language learners require effective strategies for delaying the production of the next lexical item. Otherwise, they will often 'lose the floor.' They might also come across as rude, for instance, when a word search prevents them from immediately answering a question and the interlocutor does not realize that the speaker is delaying, rather than refusing, the answer. The systematic integration of communication strategies – especially self-repair strategies – into the second language classroom will not only enhance the learners' comprehension and performance but also strengthen their confidence. Recognizing that all speakers, not only learners, hesitate, and knowing that there are successful techniques in the second language for signaling hesitation, might make learners less self-conscious, nervous, or shy, and therefore more eager to participate in target language discourse.

Furthermore, if excessively frequent usage of quasi-lexical fillers and false starts conveys a potentially poor image of the speaker, it might be wise to introduce the learners to other self-repair strategies, such as appropriate repetitions and the skillful usage of lexical fillers. The latter should be particularly useful since, in addition to gaining planning time, they engage the addressee and create a friendly, cooperative atmosphere.

Rose (1998) suggests the playful integration of quasi-lexical fillers in the classroom conversations of beginning second language learners in order to make their speech appear more fluent. He challenges his students to leave no pauses silent, but to fill them with quasi-lexical fillers instead. Since Temple (1992) has shown that the speech of beginning second language learners is particularly disfluent because it lacks fillers, this could be a good start. Those who fear that introducing learners to quasi-lexical fillers and encouraging the students to use them when they pause to think and plan the continuation of their utterance will lead to reliance on such compensation strategies and therefore mark students' conversational style as somehow inferior, should know that such a behavior can be 'unlearned' again, according to a participant in this study. After this study was completed, the researcher remarked to Sven – the only male participant in this study who used more lexical fillers than quasi-lexical fillers – that he used very few *uhs* and *uhms* compared to other participants. He responded that a few years ago when he was watching sports interviews, a female friend drew his attention to the numerous *uhs* and *uhms* uttered by the interviewees, male soccer players. She thought that they were an ugly discourse feature and Sven agreed. Since that time, Sven has monitored his speech and has tried to avoid the usage of *uhs* and *uhms*.[6]

In later stages of second language learning – or as soon as students have mastered the task of filling pauses with quasi-lexical fillers – the challenge could be

[6] This might also explain why his discourse behavior is different from that of the other male participants in this study.

to replace the quasi-lexical fillers with appropriate lexical ones, or at least with repetitions. Such exercises might accelerate the automatization of target speech production.

In order to use lexical fillers instead of quasi-lexical ones, the learner has to know their meaning and function in a variety of positions and contexts. In current teaching practice, the correct usage of German fillers, which is particularly useful for beginners and intermediates, is usually acquired in the later stages of language learning in L2 conversations with native speakers or highly proficient non-natives, but it is not taught in a foreign language classroom.[7] This is, in part, due to a lack of instructional materials about fillers. The data and analysis in the present study, however, show that a set of rules can be delineated to demonstrate which German fillers correspond to which English fillers in different contexts and positions.

To demonstrate that such rules can be deduced, the widely used German filler 'also' and the widely used English filler 'well' are chosen. The former cannot be rendered consistently by the same English filler. Here are the rules that could guide an English learner of German as a second language or a German learner of English as a second language in using 'also' and 'well,' respectively. In addition, examples illustrate the transfer of these rules into practice in demonstrating the correct usage of 'also' and its English equivalents in authentic conversational turn-constructional units.

---

[7] See page 72.

- When 'also' is used as an introductory filler (at the beginning of a turn-constructional unit or phrase) it can be rendered by 'well.'

  (1) C11 SU88: also ich kann immer fragen [...]

  well I always have the opportunity to ask someone [...]

- When 'also' is used to emphasize what has been said or what is being said, it can be rendered by 'yeah' or a semantically similar expression; in end positions also by 'so.'

  (2) C14 IS93: aber bei uns ist es relativ offen und und relativ frei

  ..also ..

  but in our country it is relatively open-minded and

  relatively free spirited .. yeah ..

- When 'also' has a social function, its equivalent is 'you know' or 'I mean.'

  (3) C11 SV101: und der hat mir also genau gesagt also wann er was gemacht hat und so weiter

  and he you know told me exactly you know when he did what and so on

- 'Well' as an introductory filler can always be rendered as 'also.'

  (4) C8 SU82: well those are the advantages of [...]

  also das sind die Vorteile von [...]

Example (5) illustrates the German usage of 'also' fillers that are rendered differently in English.

(5) C15 LA75: ja also ss- ss- die die haben auch ganz gute Leute bekommen also Mike und und Brendan also

yeah well they they have also gotten very good people you know Mike and and Brendan yeah

This demonstration of a few selected rules for the usage of 'also' and 'well' shows that it is possible to develop instructional material which can assist in successfully integrating fillers into the teaching of German or English as a second language, and which thereby provide language learners with a useful tool for more fluent, proficient, and pragmatically correct L2 communication.

6.4 Future research

Several avenues for future studies have been revealed by the present research. Since the findings are based on the conversational data produced by a small group of bilinguals, the study should be replicated with more English-German bilingual subjects. Such future research should take into account the following suggestions for improvement of the research design.

To ameliorate the investigation of the usage of lexical fillers, a different coding and grouping system should be developed and employed for the quantitative analysis. Lexical fillers could be grouped together depending on their position and their additional function, such as engaging the addressee, creating links, emphasizing, and framing. Quasi-lexical fillers and lengthenings could also be

classified depending on their position in order to create additional opportunities for comparison between the different filler types.

The examination of gendered discourse behavior may be improved not only by a larger number of participants, but also by controlling factors such as age, status, rank, relationship to the addressee, and others. The researcher proposes to choose women and men in the same age group, with a similar educational background, the same first language, a comparably superior or high command of the second language;[8] furthermore the participants should either not be acquainted with each other at all or well-acquainted. Of course, it would also be possible to collect data with groups of friends *and* strangers to examine an additional variable, namely the influence of familiarity on conversational style and/or gendered behavior in the production of self-repairs. The effects of relevant background differences could also be parceled out by appropriate statistical procedures which could not be used here because of the small size of the sample.

To further investigate the conversational style of English-German bilinguals, other discourse features should be investigated in the same way that this study has examined self-repair. The investigation of discourse notions in conversations of bilinguals – such as topic management, markedness of linguistic forms, distribution and management of given and new information, turn organization, exchange procedures, overlap, interruptions and cooperation, and others – will provide

[8] The ACTFL Proficiency Guidelines – Speaking (1999) could be used to assess the participants' communicative proficiency in their second language.

additional information on bilingual, native, and L2 language production and on conversational style. Like the present study, such research will thus increase our knowledge of language use, conversation, and bilingualism. It will help to explore further the question which devices – linguistic, cognitive, social, or individual – predominate in shaping conversational structure. Furthermore, such research might contribute to sound statements about the cross-linguistic generalizability of conversation strategies. Finally, the results will be essential in developing additional communicative strategies for second language learners.

The question arose[9] as to which time-gaining repair strategies can be regarded as being more complex. It was suggested that repetition – all appearances to the contrary – is a more complex hesitation strategy than the usage of fillers. To test this assumption, investigations into the development of self-repair strategies in first and second language acquisition should be undertaken. Identifying and comparing the sequence in which strategies – repetitions, lexical fillers, lengthenings, or quasi-lexical fillers – are mastered in L1 acquisition and in L2 acquisition would help determine the complexity of repetitions and different fillers. Comparative psycholinguistic studies in the processing – understanding and producing – of these strategies in children, adults, and adult second language learners would expand our knowledge of the complexity of hesitation strategies and help determine the factors that guide a speaker in choosing one over the other if they fulfill the same function

[9] See page 305.

(as seems to be the case for lengthening and quasi-lexical fillers, and maybe repetitions). Lexical fillers, by contrast, fulfill additional functions next to 'playing for time.'[10]

It has been suggested that the production of all self-repair strategies in an interlanguage should be thoroughly investigated. One could start with the acquisition of different self-repair strategies and pursue the process over successive development stages up to the level where they resemble a native speaker's self-repair strategies. Since the production and comprehension of self-repair strategies is not yet being taught in the second language classroom, factors influencing the acquisition of these skills are important for the development of teaching strategies and instructional materials for the acquisition of communicative strategies, of which self-repair strategies are a part. Enhanced knowledge of the developmental stages in the acquisition of second language self-repair strategies would also allow their integration into language proficiency tests. According to the ACTFL Proficiency Guidelines – Speaking (1999), superior conversational skills in second language users are attested if – among other criteria – a smooth speech flow, rare hesitations, rare word searches, and very few errors are observed in a test subject's speech. Because these features depend on a skillful and appropriate usage of self-repair strategies, self-repair should be integrated accurately into language proficiency tests. The competent and immediate repair of an incorrect or inappropriate lexical choice,

[10] See page 108.

along with the accomplished usage of lexical fillers and repetitions which mask errors, hesitations, word searches, and other gaps in the speech of native speakers will also make the speech of non-natives appear more fluent and 'correct.'

The ACTFL Proficiency Guidelines – Speaking (1999) acknowledge the importance of interactive and discourse strategies, but they do not mention self-repair strategies among them. The guidelines state that speakers on a superior level do communicate "without unnaturally lengthy hesitations." However, naturally lengthy hesitations are not defined. Furthermore, although studies of self-repair show that delaying strategies and self-corrections are used by all speakers, according to the ACTFL guidelines, delaying strategies may occur in the speech of Advanced-Mid speakers, but not in the speech of Advanced High or Superior speakers, and "noticeable self-correction" is produced by Advanced Low speakers, but not by Advanced-Mid, Advanced High, or Superior speakers. The description of lower level proficiencies mentions frequent hesitations, reformulations, self-corrections and the search for appropriate linguistic forms and words. This does suggest that the ACTFL Proficiency Guidelines – Speaking (1999) do not recognize self-repair as communicative strategies adopted by all speakers – whether they use a first or a second language – but rather as markers of an inaccurate and non-fluent second-language or interlanguage usage. The results of the present study as well as the results of suggested future research will thus allow a more accurate integration of

self-repair strategies into language proficiency tests, such as the ACTFL Proficiency Guidelines – Speaking.

BIBLIOGRAPHY

ACTFL Proficiency Guidelines – Speaking (1999). American Council on the Teaching of Foreign Languages. ACTFL, Inc.

Atkinson, J. M., & Heritage, J. (Eds.) (1984). *Structures of social action: Studies in conversation analysis*. Cambridge: Cambridge University Press.

Auer, J. C. P. (1982). Transferierte Rituale in bilingualen Interaktionen italienischer Migrantenkinder. In K.-H. Bausch (Ed.), *Mehrsprachigkeit in der Stadtregion* (pp.194-224). Düsseldorf: Schwann.

Auer, J. C. P. (1983). *Zweisprachige Konversationen.* Papiere des Sonderforschungs-bereichs 99, No 79. Konstanz.

Auer, J. C. P. (1984a). *Bilingual conversation.* Amsterdam and Philadelphia: John Benjamins Publishing Company.

Auer, J. C. P. (1984b). On the meaning of conversational code-switching. In J. C. P. Auer, & A. Di Luzio (Eds.), *Interpretive sociolinguistics: Migrants, children, migrant children* (pp. 87-108). Tübingen: Narr.

Austin, J. L. (1962). *How to do things with words*. Cambridge, MA: MIT Press.

Azuike, M. N. (1992). Style: Theories and practical application. *Language Sciences, 14*, 109-127.

Baker, C., & Prys Jones, S. (1998). *Encyclopedia of bilingualism and bilingual education*. Clevedon: Multilingual Matters.

Bear, J., Dowding, J., Shriberg, E., & Price, P. (1993). A system for labeling self-repair in Speech. *SRI Technical Note 522*, 1-9.

Bergvall, V., Bing, J., & Freed, A. F. (1996). *Rethinking language and gender research: Theory and practice*. London: Longman.

Blackmer, E., & Mitton, J. (1991). Theories of monitoring and the timing of repairs in spontaneous speech. *Cognition, 39*, 173-194.

Blakemore, D. (1992). *Understanding utterances*. Oxford: Blackwells.

Blankenship, J., & Kay, C. (1964). Hesitation phenomenon in English speech: A study in distribution. *Word, 20*, 360-372.

Blum-Kulka, S. (1991). Interlanguage pragmatics: The case of requests. In R. Phillipson, E. Kellerman, L. Selinker, M. Sharwood Smith, & M. Swain (Eds.), *Foreign/second language pedagogy research* (pp. 255-272). Clevedon: Multilingual Matters.

Boomer, D. S. (1965). Hesitation and grammatical encoding. *Language and Speech*, 8, 148-158.

Bortfeld, H., Leon, S. D., Bloom, J. E., Schober, M. F., & Brennan, S. E. (1999). Which speakers are most disfluent in conversation, and when? *Proceedings of the ICPhS* (pp. 7-10), San Francisco: ICPhS.

Branigan, H., Lickley, R., & McKelvie, D. (1999). Non-linguistic influences on rates of disfluency in spontaneous speech. *Proceedings of the ICPhS* (pp. 387-390), San Francisco: ICPhS.

Brédart, S. (1991). Word interruption in self-repairing. *Journal of Psycholinguistic Research, 20*, 123-138.

Brennan, S., & Williams, M. (1995). The feeling of another's knowing: Prosody and filled pauses as cues to listeners about the metacognitive states of speakers. *Journal of Memory and Language, 34*, 383-98.

Brown, G., & Yule, G. (1983). *Discourse analysis*. Cambridge: Cambridge University Press.

Brown, P., & Levinson, S. (1987). Universals in language usage: Politeness phenomena. In E. Goody (Ed.), *Questions and politeness* (pp. 56-311). Cambridge: Cambridge University Press.

Bucholtz, M., Liang, A. C., & Sutton, L. (1999). *Reinventing identities*. New York: Oxford University Press.

Burt, S. M. (1992). Codeswitching, convergence and compliants: The development of micro-community speech norms. *Journal of Multilingual &_Multicultural Development, 13* (1-2), 169-185.

Burton, D. (1978). Towards an analysis of casual conversation. *Nottingham Linguistics Circular, 17* (2), 131-59.

Burton, D. (1980). *Dialogue and discourse*. London: Routledge and Kegan.

Burton, D. (1981). Analysing spoken discourse. In M. Coulthard, & M. Montgomery (Eds.), *Studies in discourse analysis* (pp. 61-81). London: Routledge and Kegan.

Burton-Roberts, N. (1997). *Analysing sentences. An introduction to English syntax.* Second Edition, (First Edition: 1986). London and New York: Longman.

Cameron, D. (1997). Performing gender identity: Young men's talk and the construction of heterosexual masculinity. In S. Johnson, & U. H. Meinhof (Eds.), *Language and masculinity* (pp. 47-64). Oxford: Blackwell.

Carletta, J., Caley, R. J., & Isard, S. I. (1993). *A collection of self-repairs from the map task corpus*. Technical Report TR-47. Human Communication Research Centre, University of Edinburgh.

Chafe, W. (1994). *Discourse, Consciousness and Time: The Flow and Displacement of Conscious Experience in Speaking and Writing*. Chicago: The University of Chicago Press.

Coates, J. (1993). *Women, men and language*. Second Edition, (First Edition: 1986). London: Longman.

Cutler, A. (1983). Speakers' conceptions of the function of prosody. In A. Cutler, & D. R. Ladd (Eds.), *Prosody: Models and Measurements*. New York: Springer.

Dixon, J. A., & Foster, D. H. (1997). Gender and hedging: From sex differences to situated practice. *Journal of Psycholinguistic Research, 26* (1), 89-107.

Dorval, B. (Ed.) (1990). *Conversational organization and its development: Advances in discourse processes, Vol. XXXVIII*. Norwood NJ: Ablex.

Eckert, P. (1989). The whole woman: Sex and gender differences in variation. *Language Variation and Change, 1*, 245-267.

Eckert, P., & McConnell-Ginet, S. (1992). Think practically and look locally: Language and gender as community-based practice. *Annual review of Anthropology, 21*, 461-490.

Edmondson, W. (1981). *Spoken discourse: A model for analysis.* London: Longmans

Edwards, J. A. (1993). Principles and contrasting systems of discourse transcription. In J. A. Edwards, & M. D. Lampert (Eds.), *Talking data. Transcription and coding in discourse research* (pp. 3-33). Hillsdale NJ: Lawrence Erlbaum.

Eggins, S., & Slade, D. (1997). *Analysing casual conversation.* London: Cassell.

Erman, B. (1987). *Pragmatic expressions in English: A study of 'you know', 'you see' and 'I mean' in face to face conversation.* Stockholm: Almqvist and Wiksell International.

Ervin-Tripp, S. (1993). Conversational discourse. In J. Berko Gleason, & N. Bernstein Ratner (Eds.), *Psycholinguistics* (pp. 237-270). New York: Harcourt Brace Jovanovich.

Faerch, C., & Kasper, G. (1983). *Strategies in interlanguage communication.* London and New York: Longman.

Fayer, J., & Krasinski, E. (1987). Native and nonnative judgments of intelligibility and irritation. *Language Learning, 37* (3), 313-326.

Fillmore, C. J. (1981). Pragmatics and the description of discourse. In P. Cole (Ed.), *Radical Pragmatics* (pp. 143-166). New York: Academic Press.

Fox, B., & Jasperson, R. (1995). A syntactic exploration of repair in English conversation. In P. Davis (Ed.), *Descriptive and Theoretical Modes. The Alternative Linguistics,* (pp. 77-134). Amsterdam: John Benjamins.

Fox, B. A., Hayashi, M., & Jasperson, R. (1996). Resources and repair: a cross-linguistic study of syntax and repair. In E. Ochs, E. A. Schegloff, & S. A.

Thompson (Eds.), *Interaction and grammar* (pp. 185-237). Cambridge: Cambridge University Press.

Fox Tree, J. E. (1993). *Comprehension after speech disfluencies*. Doctoral dissertation, Stanford University.

Freed, A. F. (1999). Sex and gender difference and language: A glorious obsession. *Paper given at NWAVE 28*, October 1999: Toronto.

Freed, A. F., & Greenwood, A. (1996). Women, men, and type of talk: What makes the difference? *Language in Society, 25*, 1-26.

Fritz, G., & Hundsnurscher, F. (Eds.) (1994). *Handbuch der Dialoganalyse*. Tübingen: Narr.

Givón, T. (Ed.) (1979). *Syntax and Semantics, 12: Discourse and Syntax*. New York: Academic Press.

Givón, T. (Ed.) (1997). *Conversation, cognitive, communicative and social perspectives*. Amsterdam and Philadelphia: John Benjamins.

Goffman, E. (1967). *Interaction Ritual: Essays on Face to Face Behaviour*. Harmondsworth: Penguin.

Goffman, E. (1974). *Frame analysis*. New York: Harper and Row.

Goffman, E. (1981). *Forms of talk*. Philadelphia: University of Pennsylvania Press.

Goldman-Eisler, F. (1961). A comparative study of two hesitation phenomena. *Language and Speech, 4*, 18-26.

Goldman-Eisler, F. (1968). Psycholinguistics: Experiments in spontaneous speech. New York: Academic Press.

Goldman-Eisler, F. (1972). Pauses, clauses, sentences. *Language and Speech, 15,* 103-13.

Goodwin, C. (1981). *Conversational Organisation: Interaction Between Speakers and Hearers.* New York: Academic Press.

Grice, H. P. (1975). Logic and conversation. In P. Cole, & J. Morgan (Eds.), *Speech acts. Syntax and semantics, 3* (pp. 41-58). New York: Academic Press.

Grice, H. P. (1978). Further notes on logic and conversation. In P. Cole (Ed.), *Radical pragmatics. Syntax and semantics, 9* (pp. 113-128). New York: Academic Press.

Gumperz, J. J. (1982). *Discourse strategies.* Cambridge: Cambridge University Press.

Gumperz, J. J., & Hymes, D. (1964). The ethnography of communication. *American Anthropologist, 66* (6), 103-114.

Gyasi Obeng, S. (1992). A phonetic description of some repair sequences in Akan conversation. *Text, 12* (1), 59-80.

Hall, K., & Bucholtz, M. (1995). *Gender articulated: Language and the socially constructed self.* New York: Routledge.

Halmari, H. (1995). The interplay of syntax and discourse in the explanation of Finnish-English code-switching. *Paper presented at the Annual Meeting of the Linguistic Society of America,* New Orleans.

Hänni, R. (1980). What is planned during speech pauses? In H. Giles, W. P. Robinson, & P. M. Smith (Eds.), *Language: Social psychological perspectives* (pp. 321-26). Oxford: Pergamon Press.

Hayashi, M. (1994). A comparative study of self-repair in English and Japanese conversation. In N. Akatsuka (Ed.), *Japanese/Korean Linguistics, vol. IV* (pp. 77-93). Stanford: CSLI.

Hieke, A. (1981). A context-processing view of hesitation phenomena. *Language and Speech, 24*, 147-160.

Holmes, J. (1986). Functions of *you know* in women's and men's speech. *Language in Society, 15*, 1-22.

Hundsnurscher, F. (1995). Some remarks on the development of dialogue analysis. In F. Hundsnurscher, & E. Weigand (Eds.), *Future perspectives of dialogue analysis* (pp. 79-94). Tübingen: Niemeyer.

Hymes, D. (1972a). On communicative competence. In J. B. Pride, & J. Holmes (Eds.), *Sociolinguistics* (pp. 269-285). Harmondsworth: Penguin.

Hymes, D. (1972b). Towards ethnographies of communication: The analysis of communicative events. In P. Giglioli (Ed.), *Language and social context* (pp. 21-33). Harmondsworth: Penguin Books.

Hymes, D. (1972c). Models of the interaction of language and social life. In J. Gumperz, & D. Hymes (Eds.), *Directions in sociolinguistics: The ethnography of communication* (pp. 35-71). New York: Holt, Rinehart & Winston.

Jasperson, R. M. (1998). *Repair after cut-off: Explorations in the grammar of focused repair of the turn-constructional unit-so-far.* Doctoral dissertation, University of Colorado, Boulder. Ann Arbor: UMI.

Jefferson, G. (1974). Error correction as an interactional resource. *Language in Society, 2*, 181-199.

Johnson, M. G. (1996). *Discourse markers in Tejano speaking: Code switching as a resource in Spanish-English conversation.* Doctoral dissertation, University of Texas, Austin. Ann Arbor: UMI.

Johnson, S., & Meinhof, U. H. (1997). *Language and masculinity.* Oxford: Blackwell.

Kasper, G., & Blum-Kulka, S. (1993a). *Interlanguage pragmatics.* New York and Oxford: Oxford University Press.

Kasper, G., & Blum-Kulka, S. (1993b). Interlanguage pragmatics: An introduction. In G. Kasper, & S. Blum-Kulka (Eds.), *Interlanguage pragmatics* (pp. 3-18). New York and Oxford: Oxford University Press.

Kasper, G., & Dahl, M. (1991). Research methods in interlanguage pragmatics. *Studies in Second Language Acquisition, 13*, 215-247.

Kasper, G., & Kellerman, E. (1997). *Communication Strategies.* London and New York: Longman.

Kasper, G., & Schmidt, R. (1996). Developmental issues in interlanguage pragmatics. *Studies in Second Language Acquisition, 18*, 149-169.

Kormos, J. (1999). Monitoring and self-repair in L2. *Language Learning, 49* (2), 303-342.

Labov, W. (1970). The Study of Language in its Social Context. *Stadium Generale, 23* (1), 30-80.

Labov, W. (1972a). *Language in the inner city*. Philadelphia: University of Pennsylvania Press.

Labov, W. (1972b). *Sociolinguistic patterns*. Philadelphia: University of Pennsylvania Press.

Lakoff, R. (1975). *Language and woman's place*. New York: Harper and Row.

Lakoff, R. (1979). Stylistic strategies within a grammar of style. *Annals of the New York Academy of Science, Vol. 327*, 53-78.

Lakoff, R. (1990). *Talking power: The politics of language*. New York and London: Longmans.

Lampert, M. D., & Ervin-Tripp, S. M. (1993). Structured coding for the study of language and social interaction. In J. A. Edwards, & M. D. Lampert (Eds.), *Talking data. Transcription and coding in discourse research* (pp. 169-207). Hillsdale, NJ: Lawrence Erlbaum.

Lennon, P. (1994). Self-correction and error in advanced learner spoken narrative. In G. Bartelt (Ed.), *The dynamics of language processes. Essays in honor of Hans W. Dechert* (pp. 125-156). Tübingen: Narr.

Levelt, W. J. M. (1983). Monitoring and self-repair in speech. *Cognition, 14*, 41-104.

Levelt, W. J. M. (1989). *Speaking: From intention to articulation.* Cambridge, MA: MIT Press.

Levelt, W. J. M. (1992). The perceptual loop theory not disconfirmed: A reply to MacKay. *Consciousness and Cognition, 1*, 226-230.

Levelt, W. J. M. (1993). Language use in normal speakers and its disorders. In G. Blanken, J. Dittmann, H. Grimm, J. C. Marshall, & C. W. Wallesch (Eds.), *Linguistic disorders and pathologies* (pp. 1-15). Berlin: de Gruyter.

Levinson, S. C. (1983). *Pragmatics*. Cambridge: Cambridge University Press.

Lickley, R. J. (1994). *Detecting disfluency in spontaneous speech*. Doctoral dissertation, University of Edinburgh.

Livia, A., & Hall, K. (1997). *Queerly phrased: Language, gender, and sexuality*. New York: Oxford university Press.

Maclay, H., & Osgood, C. E. (1959). Hesitation phenomena in spontaneous English speech. *Word, 15*, 19-44.

Maschler, Y. (1991). The language games bilinguals play: Language alternation at language game boundaries. *Language & Communication, 11* (4), 263-289.

Maynard, S. K. (1989). *Japanese conversation: Self-contextualization through structure and interactional management*. Norwood: Ablex.

Mischler, E. G. (1991). Representing discourse: The rhetoric of transcription. *Journal of Narrative and Life History, 1* (4), 255-280.

Moerman, M. (1977). Self-correction in a Thai conversational corpus. *Language 53* (4), 872-882.

Nishimura, M. (1995). Varietal conditioning in Japanese/English code-switching. *Language Sciences, 17* (2), 123-145.

Nooteboom, S. (1980). Speaking and unspeaking: Detection and correction of phonological and lexical errors in spontaneous speech. In V. Fromkin (Ed.), *Errors in linguistic performance* (pp. 87-95). New York: Academic Press.

O'Connor, N. (1988). Repairs as indicative of interlanguage variation and change. *Georgetown University Round Table 1988*, 251-259.

O'Shaughnessy, D. (1994). Correcting complex false starts in spontaneous speech. *Proceedings of the IEEE Conference on Acoustics, Speech, and Signal Processing* (pp. 349-352). Adelaide, Australia: IEEE.

Owen, M. (1981). Conversational units and the use of 'well...'. In: P. Werth (Ed.), *Conversation and discourse* (pp. 99-116). New York: St. Martin's Press.

Postma, A., Kolk, H., & Povel, D. J. (1990). On the relation among speech errors, disfluencies and self-repair. *Language and Speech, 33* (1), 19-29.

Poulisse, N., & Bongaerts, T. (1994). First language use in second language production. *Applied Linguistics, 15*, 36-57.

Prideaux, G. D. (1994). Two complementary approaches to discourse analysis. *Linguistica Atlantica, 16*, 113-134.

Renkema, J. (1993). *Discourse Studies: An Introductory textbook.* Amsterdam: John Benjamins.

Rieger, C. L. (1999). Gender differences in the filling of hesitation pauses in English and German spoken discourse. *Paper given at NWAVE 28*, October 1999: Toronto.

Romaine, S. (1995). *Bilingualism* (Second edition, first edition 1989). Oxford: Blackwell.

Romero, M. (1988). Chicano discourse about language use. *Language Problems & Language Planning, 12* (2), 110-129.

Rose, R. L. (1998). *The communicative value of filled pauses in spontaneous speech.* M.A. thesis, University of Birmingham.

Sacks, H. (1992). *Lectures on Conversation,* Vol. I & II. Cambridge, MA: Blackwell.

Sacks, H., Schegloff, E. A., & Jefferson, G. (1974). A simplest systematics for the organization of turn-taking in conversation. *Language, 50* (4), 696-733.

Sacks, H., Schegloff, E. A., & Jefferson, G. (1978). A simplest systematics for the organization of turn-taking in conversation. Reprinted in J. Schenkein (Ed.), *Studies in the organization of conversational interaction* (pp. 7-55). New York: Academic Press.

Schegloff, E. A. (1979). The relevance of repair to syntax-for-conversation. In T. Givon (Ed.), *Syntax and Semantics 12: Discourse and Syntax* (pp. 261-286). New York: Academic Press.

Schegloff, E. A. (1984). On some questions and ambiguities in conversation. In J. M. Atkinson, & J. Heritage, J. (Eds.), *Structures of social action: Studies in conversation analysis* (pp. 28-52). Cambridge: Cambridge University Press.

Schegloff, E. A. (1988). Goffman and the analysis of conversation. In P. Drew, & A. Wootton (Eds.), *Erving Goffman: Exploring the Interaction Order.* Cambridge: Polity Press.

Schegloff, E. A. (1992). In another context. In A. Duranti, & C. Goodwin (Eds.), *Rethinking context: Language as an interactive phenomenon.* Cambridge: Cambridge University Press.

Schegloff, E. A. (1997). Third turn repair. In G. R. Guy, C. Feagin, D. Schiffrin, & J. Baugh (Eds.), *Towards a social science of language. Papers in honor of*

William Labov, Vol. 2: Social interaction and discourse structures (pp. 31-40). Amsterdam: John Benjamins.

Schegloff, E. A., Jefferson, G., & Sachs, H. (1977). The preference for self-correction in the organization of repair in conversation. *Language, 53*, 361-382.

Schiffrin, D. (1987). *Discourse markers*. Cambridge: Cambridge University Press.

Schiffrin, D. (1988). Conversation analysis. In F. J. Newmeyer (Ed.), *Linguistics: The Cambridge Survey, Vol. IV, Language: The socio-cultural context*, (pp. 251-276). Cambridge: Cambridge University Press.

Schiffrin, D. (1990). Conversation analysis. *Annual Review of Applied Linguistics, 11*, 3-16.

Schiffrin, D. (1994). *Approaches to discourse.* Oxford: Blackwell.

Schröder, P., & Steger, H. (Eds.) (1981). *Dialogforschung*. Düsseldorf: Schwann.

Searle, J. R. (1969). *Speech acts: An essay in the philosophy of language.* Cambridge: Cambridge University Press.

Searle, J. R. (1976). A classification of illocutionary acts. *Language in Society, 5*, 1-23.

Searle, J. R. (Ed.) (1989). *(On) Searle on conversation.* Amsterdam: John Benjamins.

Searle, J. R. (1989). On conversation. In J. R. Searle (Ed.), *(On) Searle on conversation* (pp. 1-77). Amsterdam: John Benjamins.

Seliger, H. (1980). Utterance planning and correction behavior: Its function in the grammar construction process for second language learners. In H. Dechert,

& M. Raupach (Eds.), *Towards a cross-linguistic assessment of speech production* (pp. 87-99). Frankfurt: Lang.

Selting, M. (1987). Reparaturen und lokale Verstehensprobleme oder: zur Binnenstruktur von Reparatursequenzen. *Linguistische Berichte, 108*, 128-147.

Shriberg, E. E. (1994). *Preliminaries to a theory of speech disfluencies*. Doctoral dissertation, University of California, Berkeley.

Shriberg, E. E. (forthcoming). *Disfluencies: Findings from spontaneous speech with implications for cognition, conversation, and computation*. Amsterdam: John Benjamins.

Sperber, D., & Wilson, D. (1995). *Relevance. Communication and cognition*. Second Edition (First Edition: 1986). Oxford and Cambridge: Blackwell.

Sorjonen, M.-L. (1991). *Remarks on next-turn repair initiators in Finnish conversations*. Los Angles: Mimeo.

Straehle, C. A. (1997). *German and American conversational style: A focus on narrative and agonistic discussion as sources of stereotypes*. Doctoral dissertation, Georgetown University, Washington, D.C. Ann Arbor: UMI.

Stenström, A.-B. (1994). *An introduction to spoken interaction*. London: Longman.

Tannen, D. (1984). *Conversational style. Analyzing talk among friends*. Norwood, NJ: Ablex.

Tannen, D. (1986). *That's not what I meant!: How conversational style makes or breaks relationships*. New York: Ballantine.

Tannen, D. (1989). *Talking voices: Repetition, dialogue and imaginery in conversational discourse*. Cambridge: Cambridge University Press.

Tannen D. (1990). *You just don't understand: Men and women in conversation*. New York: Ballantine Books.

Tannen, D. (1994). *Gender and discourse*. Oxford: Oxford University Press.

Temple, L. (1992). Disfluencies in learner speech. *Australian Review of Applied Linguistics, 15*, 29-44.

Tischer, B. (1997). Selbstkorrekturen in Dialogen: Regeln zur automatischen Syntax-verarbeitung. *Linguistische Berichte, 170*, 312-44.

van Hest, E. (1996). *Self-repair in L1 and L2 production*. Tilburg: Tilburg University Press.

van Hest, E., Poulisse, N., & Bongaerts, T. (1997). Self-repair in L1 and L2 production: An overview. *ITL, Review of Applied Linguistics, 117-118* (Dec.), 85-115.

van Wijk, C., & Kempen, G. (1987). A dual system for producing self-repairs in spontaneous speech: Evidence from experimentally elicited corrections. *Cognitive Psychology, 19*, 403-440.

Voss, B. 1979 Hesitation phenomena as sources of perceptual errors for non-native speakers. *Language and Speech 22,* 129-144.

Weber, T. (1998). *Shared background and repair in German conversation*. Doctoral dissertation, University of Colorado, Boulder. Ann Arbor: UMI.

Werth, P. (Ed.) (1981). *Conversation and discourse*. New York: St. Martin's Press.

Wiese, R. (1982). *Psycholinguistische Aspekte der Sprachproduktion: Sprechverhalten und Verbalisierungsprozesse*. Doctoral dissertation, Universität Bielefeld.

Wiese, R. (1984). Language production in foreign and native languages: Same or different? In H. Dechert, D. Möhle, & M. Raupach (Eds.), *Second language productions* (pp. 11-25). Tübingen: Narr.

Wodak, R. (1997). *Gender and discourse*. London: Sage Publications.

Yule, G. (1996). *Pragmatics*. Oxford: Oxford University Press.

APPENDIX A

OVERVIEW OF THE SIXTEEN CONVERSATIONS

Table A: Overview of the sixteen conversations

Conversations	Language	Participants
One, 24 IX 1997, 3:10 p.m.	German	Henry, Werner
Two, 24 IX 1997, 3:40 p.m.	English	Henry, Werner
Three, 25 IX 1997, 3:00 p.m.	English	Gordon, Sven
Four, 25 IX 1997, 3:30 p.m.	German	Gordon, Sven
Five, 25 IX 1997, 4:00 p.m.	German	Isabel, June
Six, 25 IX 1997, 4:30 p.m.	English	Isabel, June
Seven, 29 IX 1997, 3:00 p.m.	German	Lauren, Sue
Eight, 29 IX 1997, 3:30 p.m.	English	Lauren, Sue
Nine, 29 IX 1997, 4:30 p.m.	English	June, Werner
Ten, 29 IX 1997, 4:50 p.m.	German	June, Werner
Eleven, 30 IX 1997, 3:05 p.m.	German	Sue, Sven
Twelve, 30 IX 1997, 3:35 p.m.	English	Sue, Sven
Thirteen, 30 IX 1997, 5:00 p.m.	English	Gordon, Isabel
Fourteen, 30 IX 1997, 5:30 p.m.	German	Gordon, Isabel
Fifteen, 6 X 1997, 3:10 p.m.	German	Henry, Lauren
Sixteen, 6 X 1997, 3:40 p.m.	English	Henry, Lauren

APPENDIX B

TRANSCRIPTION CONVENTIONS

:	start of turn/utterance/part of utterance
..	slight pause
...	noticeable pause
... (1.5)	long pause, number in brackets indicates length in seconds
=	lengthening of a sound or sound combination
-	utterance that was cut off (either by speaker or addressee)
CAPS	excited and/or emphasized delivery
(H)	inhalation
(Hx)	exhalation
?	spoken with the intonation of a question
☺	laughter
{☺}	laughter of speaker and addressee
[1 overlap 1]	a stretch of speech overlapping with another stretch uttered by a different speaker
/x/	undecipherable syllable
/y/	undecipherable word
/yyy/	undecipherable stretch of speech
<E English E>	code switch to English
<G deutsch G>	code switch to German
underlined	the underlining draws attention to a particular feature that is being discussed and/or analyzed

[...]	omitted transcription; continuation of utterance and/or turn
italic	italicized utterance has been translated from German into English
(original)	untranslated quasi-lexical or lexical item

CODES

EH	quasi-lexical fillers, such as 'eh,' 'ehm,' 'uh,' or 'uhm' etc.
=	lengthening of a sound or sound combination
FI	miscellaneous (lexical fillers other than YK, IM and NB)
YK	you know/weißte
IM	I mean/I think/I find/I guess and their German equivalent
NB	idiosyncratic fillers
S +	false start + type
R+	repetition + type
A+	altered repetition + type
AJ	adjective
AV	adverb
C	conjunction
DA	definite article
DE	demonstrative pronoun
IA	indefinite article

N	noun
NP	noun phrase
PE	personal pronoun
PO	possessive pronoun
P	preposition
PP	prepositional phrase
PV	pronoun + verb (or VP)
QP	interrogatives
RP	relative pronoun
V	verb
VP	verbal phrase

TRANSCRIPT OF EXCERPT FROM CONVERSATION 2

C2 HE1: So= (H) ... I think

C2 HE2: my my last interrupted sentence was to the effect

C2 HE3: that ... the economy is so STRUCtured

C2 HE4: .. that a DOWNwards spiral ... cannot be accommodated without disastrous results

C2 HE5: whereas the UPWARDS spiral ... is the only .. HEALTHY uh direction for it

C2 HE6: ... where- .. the way it works at the moment we must have [1growth1]

C2 WE: [1uhuh1]

C2 HE7: otherwise we seem to have .. collapse [sic]

C2 WE1: the en=tire LIFESTyle is based on the idea

C2 WE2: that we= MUST have growth

C2 WE3: because without growth there cannot be a rise in /y/

C2 WE4: there cannot be a rise in the standard of living

C2 WE5: uh .. and any country that cannot show two and a half or three percent growth

C2 WE6: is considered to be a uh country that is having economic difficulties

C2 H1: indeed

C2 WE7: u=h ...I='m not sure

C2 WE8: that one can't stop this spiral altogether

C2 WE9: because one can certainly see from our- uh in in the provincial affairs

CODING FOR THE TRANSCRIPTED EXCERPT FROM CONVERSATION 2

C2 HE1: FI FI

C2 HE2: RPO

C2 HE3:

C2 HE4:

C2 HE5: EH

C2 HE6: SRP

C2 WE:

C2 HE7:

C2 WE1: =

C2 WE2: =

C2 WE3:

C2 WE4:

C2 WE5: EH

C2 WE6: EH

C2 HE:

C2 WE7: EH = =

C2 WE8:

C2 WE9: SPO EH RP

APPENDIX C

OVERVIEW AND EXAMPLES OF ALL SELF-REPAIRS

Table C: Overview of all self-repairs

Analyzed self-repairs	English	German	Total
EH	971	1351	2322
FI	114	427	541
NB	182	345	527
IM	167	110	277
YK	92	2	94
=	202	354	556
All fillers	1701	2402	4103
RPE	178	107	285
RC	111	119	230
SPV	99	90	189
RPV	119	52	171
RP	95	69	164
RDA	64	63	127
SPE	45	42	87
RDE	23	62	85
RIA	40	44	84
SC	39	40	79
Unanalyzed self-repairs	English	German	Total
SV	43	21	64
SPP	19	29	48
AN	19	28	47
SNP	24	22	46
RPP	21	20	41
RV	28	13	41
SDE	12	26	38
RAJ	16	14	30
AAJ	7	18	25
AV	9	15	24
RN	11	12	23
ADE	2	21	23
SP	9	13	22
ANP	8	14	22
RPO	12	9	21
RRP	8	13	21
SDA	12	9	21
SN	14	6	20
RQP	9	9	18

Unanalyzed self-repairs	English	German	Total
APE	2	16	18
RAV	9	8	17
AIA	3	13	16
SAJ	10	5	15
RNP	5	8	13
AC	4	9	13
APV	5	6	11
SPO	6	4	10
SAV	3	7	10
APP	2	8	10
SRP	2	7	9
SVP	5	4	9
AQP	5	4	9
AP	2	5	7
AAV	3	3	6
SIA	6	0	6
APO	1	3	4
SQP	3	1	4
ARP	0	3	3
TOTAL OF ALL SELF-REPAIRS	2873	3516	6389

Examples

The following are examples of the subcategories of self-repair types that have neither been presented nor analyzed in the text (see page 97).

(SV) C12 SU133:[1] because of course when you hea- you get so few chances to hear it spoken

(SPP) C3 GO399: uh uh uh there'd be a p- there'd be two or three kids out there in that- in the dark practically

(AN) C3 GO94: the unevenness and the slip- slipperiness an- uh cause

[1] Every example is preceded by a combination of letters and numbers. They indicate from which conversation the example is taken (C12 for conversation number twelve); who is talking (here Sue is) and with which of the speaker's units the example starts of (here the example starts with Sue's 133th unit).

injuries [...]

(SNP) C9 JU104: I went my first time- for my first time two years ago

(RPP) C3 GO452: [...] we did quite a bit of touring around just in the small in the small area as well [...]

(RV) C3 SV268: yeah that was .. was really .. quite fun

(SDE) C12 SV68: but I finished this- that in Hannover

(RAJ) C12 SV156: I had some some basics

(AAJ) C12 SV164: it was not so eas- easy for me [...]

(AV) C12 SV49: when we g- go to the theater [...]

(RN) C8 SU446: I I find that extremely young to be in a first sort of tenure uh tenure track job [...]

(ADE) C4 GO 34: und wir hatten so diese eh eh diesen Eindruck [...] *and we had this uh uh this impression* [...]

(SP) C12 SV111: [...] when I was on a conference i=n- .. well not exactly in Berlin but .. near Berlin [...]

(ANP) C12 SU30: I mean the la- ... the last thing on your mind is .. gee do I have that correct expression [...]

(RPO) C12 SU128: do you understand her her mother tongue?

(RRP) C9 WE179: well they taught a couple who who were willing to

(SDA) C9 WE133: and the- in some places they speak German [...]

(SN) C12 SU57: who ha=d u=h you know German- uh business German [...]

(RQP) C9 JU14: what other what other a- areas are there? [...]

(APE) C12 SU76: a=h u=h i- it and uh it was okay [...]

(RAV) C13 IS214: I never never do that

(AIA) C12 SU263: and the Kassel year was a uhm uhm an exchange program with two other universities [...]

(SAJ) C3 GO252: [...] you can keep up your anaerobic- uh u=h or your aerobic fitness

(RNP) C13 GO264: but at least the law books- their principle on uh uh women's right a woman's control of uh uh a woman's control of her body etc. seemed a bit more liberal [...]

(AC) C13 IS243: and of course they know tha- that it's limited

(APV) C13 GO240: but they saw the others they were the others [...]

(SPO) C13 GO50: maybe that's just my- uh uh uh an old belief [...]

(SAV) C13 IS199: and she- uh I used hers so and diff- and the other way around [...]

(APP) C9 WE154: but they .. ☺ uh they didn't wanna be- didn't want to be seen b=y you know by their peers by their friends

(SRP) C12 SU87: [...] and pay attention to THAT DIALECT which- uh ☺ or to the many dialects in Stuttgart [...]

(SVP) C9 JU59: well it's part of- my parents feel ve=ry ... attached to that part of their life [...]

(AQP) C13 GO29: and ho- how is it going with settling in? [...]

(AP) C8 SU 296: and I can't imagine that she would have got that uh fr- from first of all from UBC [...]

(AAV) C3 GO245: [...] you saw prob- probably some friends of mine [...]

(SIA) C9 JU8: it- uh there was a- an open area [...]

(APO) C2 WE 44: [...] the Greens have maintained uh thei- their share of abeout eleven percent

(SQP) C13 GO11: and where- uh just like out of curiosity where were you [...]

(ARP) C4 SV103: [...] in diesen Vierteln de- die doch eng sind [...]

[...] *in those quarters which are surely narrow* [...]

APPENDIX D

MATHEMATICAL FACTORS USED TO STANDARDIZE THE DATA

Table D: Overview of mathematical factors used to standardize the data

Participants	ES	EO	GS	GO
Gordon	1.11	1.63	1.19	1.15
Henry	2.17	1.77	3.54	2.13
Isabel	1.76	1.33	1.95	1.66
June	1.82	4.58	1.84	2.44
Lauren	2.15	3.58	2.64	3.97
Sue	1.2	1.02	1.2	1.08
Sven	2.03	2.49	1.64	2.05
Werner	2.93	1.89	2.06	2.73

Legend: E = English, G = German, S = Same-gender partner, O = Opposite-gender partner.

APPENDIX E

LEXICAL FILLERS CODED UNDER THE CATEGORY 'MISCELLANEOUS'

Table E: Overview of miscellaneous fillers

Miscellaneous fillers	SU	LA	JU	IS	GO	HE	WE	SV
yeah	9	-	5	8	8	5	6	4
okay	7	-	6	-	-	-	-	-
well	7	9	7	3	3	5	18	4
anyway	-	1	-	-	-	-	-	-
so	-	4	3	130	5	3	4	4
whatever	-	-	-	-	-	-	1	-
right?	13	4	1	-	-	-	5	-
ja	37	6	2	17	10	7	5	11
nee	-	-	8	-	-	-	-	-
na	-	-	-	-	-	-	6	-
also	68	67	-	32	7	14	15	18
da	-	-	-	-	56	-	4	-
so	11	-	2	5	8	-	-	-
ja?	63	3	-	10	13	-	4	-
ne?	-	3	-	9	-	-	-	30
nicht?	-	-	-	-	-	6	-	-
und/oder so	-	-	-	-	-	-	4	7

Legend: Su = Sue, LA = Lauren, JU = June, IS = Isabel, GO = Gordon, HE = Henry; WE = Werner, SV = Sven.