Amount, Purpose, and Teacher Awareness of L1 Use in the Foreign Language Classroom

by

Juliane Claudia de la Campa
B.A., University of Victoria, 2003

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of

MASTER OF ARTS

in the Department of Linguistics

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University of Victoria

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Abstract

This study was concerned with the teachers’ use of the students’ first language (L1) in two second-year German conversation university courses. It examined amount, purposes, and teacher awareness of L1 use. Data were collected through video and audio recordings of the two classes (a total of 6.6 h), teacher interviews, and stimulated recall sessions. Amount and purposes of L1 use were determined by word count and coding of L1 utterances. Results revealed a relatively low average of 11.3 % L1 use. L1 was used for the purposes of translations, activity instructions, personal comments, and bilingual L1 use. A comparison of the teachers’ estimation of amount and purposes of L1 use with their classroom practice showed that they were aware of their L1 use to some extent. Findings also suggest that teachers may benefit from becoming aware of their L1 use and hence avoid extensive L1 use in their classes.
# Table of Contents

Abstract iii  
Table of Contents iv  
List of Tables vi  
List of Figures vii  
Acknowledgements viii  
Dedication ix  

Chapter 1  
INTRODUCTION  
1. 1 Background 1  
1. 2 Purpose of the Study 3  
1. 3 Significance of the Research Problem 4  
1. 4 Organization of the Thesis 5  

Chapter 2  
BACKGROUND  
2. 1 The Use of L1 in L2 Teaching 6  
2. 2 Arguments against the Use of L1 8  
2. 3 Arguments for the Use of L1 12  
2. 4 Empirical Studies on the Use of L1 in L2 Classrooms 18  
2. 5 Summary and Research Problem 26  
2. 6 Research Questions 27  

Chapter 3  
METHODOLOGY  
3. 1 Method and Materials 28  
3. 2 Setting 29  
3. 3 Participants 30  
3. 3. 1 Teacher A and Teacher B 30  
3. 3. 2 Students 31  
3. 4 Data Collection 32  
3. 4. 1 Classroom Recordings 32  
3. 4. 2 Teacher Interviews 33  
3. 4. 3 Stimulated Recall Sessions 33  
3. 5 Data Analysis 36  
3. 5. 1 Determining the Amount of L1 use 38  
3. 5. 2 Determining the Purposes of L1 use 39  
3. 5. 3 Determining the Teachers’ Perceptions of their L1 Use 47
Chapter 4
ANALYSIS AND RESULTS

4. 1 Amount of L1 Use in German Classes 49
   4.1. 1 Comparison of L1 Amount within and between Teachers 50
4. 2 Purposes of L1 Use 53
   4.2. 1 Comparison of L1 Purposes between Teachers 56
4. 3 Interview and Stimulated Recall Results 64
   4.3. 1 Interview Data: Teacher A and Teacher B 64
   4.3. 2 Comparison of Teacher Perceptions with Classroom Data 75
   4.3. 3 Stimulated Recall Data: Teacher A and Teacher B 80
4. 4 Summary 93

Chapter 5
DISCUSSION AND CONCLUSION

5. 1 Discussion and Conclusion 95
5. 2 Pedagogical Implications 105
5. 3 Implications for Teacher Training 107
5. 4 Suggestions for Further Research 108

References 111

Appendix A Teacher Interview Questions 117
Appendix B Transcription Conventions 118
Appendix C Sample of Classroom Transcript (Teacher A) 119
Appendix D Sample of Classroom Transcript (Teacher B) 120
# List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Examples of Functional Categories</td>
<td>43</td>
</tr>
<tr>
<td>Table 2</td>
<td>Distribution of L1 and L2 Words</td>
<td>50</td>
</tr>
<tr>
<td>Table 3</td>
<td>Significance Level of Differences between L1 Amounts of Classes</td>
<td>51</td>
</tr>
<tr>
<td>Table 4</td>
<td>Distribution of L1 Utterances</td>
<td>53</td>
</tr>
<tr>
<td>Table 5</td>
<td>Purposes of L1 Utterances</td>
<td>55</td>
</tr>
<tr>
<td>Table 6</td>
<td>Purposes of L1 Utterances: Teacher A and Teacher B</td>
<td>57</td>
</tr>
<tr>
<td>Table 7</td>
<td>Subcategories of Functional Categories</td>
<td>58</td>
</tr>
<tr>
<td>Table 8</td>
<td>Purposes of Function-based Translations</td>
<td>61</td>
</tr>
<tr>
<td>Table 9</td>
<td>Teachers' Interview Categories</td>
<td>66</td>
</tr>
<tr>
<td>Table 10</td>
<td>Comparison of Teachers’ Perceptions and Classroom Practice</td>
<td>76</td>
</tr>
<tr>
<td>Table 11</td>
<td>Teachers’ Stimulated Recall Categories</td>
<td>81</td>
</tr>
</tbody>
</table>
List of Figures

<table>
<thead>
<tr>
<th>Figures</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>L1 Use across German Teachers' Classes</td>
<td>51</td>
</tr>
<tr>
<td>Figure 2</td>
<td>L1 Use across German Teachers' Classes (without Announcement at Beginning of Class 2)</td>
<td>52</td>
</tr>
<tr>
<td>Figure 3</td>
<td>Content-based Translations and Function-based Translations</td>
<td>59</td>
</tr>
</tbody>
</table>
Acknowledgements

I would like to thank my supervisor Dr. Nassaji for the help and expertise he has provided during the research and writing process of the thesis. Without his guidance, the completion of this work would have been impossible. I would also like to thank the teachers and students who participated in the research, without whom the project would not have taken place. Finally, I would like to acknowledge the sustained technical and emotional support M. Sutin has rendered during the course of this work.
Dedication

Für meinen Vater.
Chapter 1
Introduction

1.1 Background

This study examined the use of the students' first language (L1) in two university German classes. The study was motivated by a debate in the field, in which theorists and practitioners of language teaching discuss whether L1 has a place in the language classroom. Although the call for a complete exclusion of L1 has abated, the tenor still remains that good language teaching equals a minimization of L1 use therein (e.g., Chambers, 1991).

Critics of L1 use bring forth many arguments that are meant to discourage the recourse to L1 (e.g., Pollio & Duff, 1994; Harbord, 1992; Mori, 2004). Their concerns are a detrimental decline in quantity of teachers' target language (L2) use and subsequent lack of chances of negotiation of meaning. These factors are considered critical for language learning success. Furthermore, similar to how children absorb the language patterns of L1 around them, adult L2 learning is seen to take place in a same fashion. Nevertheless, no conclusive empirical evidence has been gathered to support these claims (Atkinson, 1993; Auerbach, 1994; Macaro, 1995).

Proponents of L1 use come from a variety of perspectives in support of the use of L1. They do not argue for a return to the grammar translation method, in which the use of L2 was a rare occasion rather than the rule. However, supporters ask for a critical reevaluation of the current predominant view that L2 learning should take place exclusively through the medium of L2 (e.g., Atkinson, 1993). Particularly, advocates of occasional L1 use question the similarity between L1 and L2 learning. They counter that learners who have mastered their first language are sophisticated cognitive individuals
who invariably draw upon their L1 to make sense of the world, new concepts, and a new language. Thus, advocates of L1 use suggest that the rejection of L1 use would not only mean foregoing a valuable pedagogical tool for lexical contrasting and discussion of L1/L2 transferability (Hinkel, 1980; Artemeva, 1995). L1 advocates also assert that banning L1 from the language classroom would ignore the cognitive reality that connecting new concepts to already existing knowledge creates better chances for language learning success (van Lier, 1995).

In recent years, the empirical investigation of the use of L1 in L2 classrooms has received much attention (e.g., Liebscher & Dailey-O’Cain, 2004; Chavez, 2003; Swain & Lapkin, 2000; Anton & DiCamilla, 1999; Cook, 1999; Butzkamm, 1998; Garrett, Griffiths, James, & Scholfield, 1994; Tudor, 1989; Kharma & Hajjaj, 1989; Guthrie, 1987). Some research studies have explored classroom practice by investigating the amount and the purposes for which L1 is employed (e.g., Tang, 2002; Macaro, 2001; Turnbull, 2001; Nizegorodcew, 1996; Duff & Polio, 1990; Lin, 1990). Other studies have looked at teacher and student perceptions of L1 use in the classroom (e.g., Mpras, 2003; Levine, 2003; Spada & Lightbown, 2002; Macaro, 1995; Schweers, 1999). Macaro (2001) summarizes these research interests by asking: “Just how much codeswitching do teachers use and do they do so intentionally and, if so, for what purposes (p. 532)?”

However, not much research has examined the relationship between teachers’ perceptions of their L1 use and their actual classroom practice. Incidental findings suggest that teachers may not always be aware of when and for what purpose they use L1 (Duff & Polio, 1990; Polio & Duff, 1994). In order to address this issue, the present study

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1 Switching from one language to another
investigated amount and purposes of L1 use as well as teachers' perceptions of their L1 use in class.

The study took place in a foreign language context, which is characterized by students learning a language that they do not usually encounter outside of class. In the foreign language context, students and teachers share a common language. This is different from a second language context, in which students study a language in the country where the language is spoken. In such a context, they come from a variety of language backgrounds with which few teachers are familiar. Thus, the issue of using L1 is mostly relevant to the foreign language context. In the remainder of the thesis, the term L2 is used to refer to the language that students are learning in both the second and foreign language context.

1.2 Purpose of the Study

The present study was designed to examine the use of L1 in two German language classrooms. The focus of the project was four-fold: a) to investigate the amount of L1 that the two teachers used in their classes, b) to analyze the purposes for which they used L1, c) to explore the awareness the teachers had of their L1 use, and d) to compare the differences of L1 use between the two participating teachers, an experienced and an inexperienced teacher.
1. 3 Significance of the Research Problem

The study was motivated by a debate in the field of second language acquisition of whether L1 has a place in the language learning classroom. Previous research also points to a possible lack of teacher awareness concerning their language use. A surprising mismatch between teachers' perceptions of their L1 use and their classroom practice was revealed when information collected in teacher interviews and data from their classrooms was compared. It was found that teachers underestimated their L1 use by up to 35% (Duff & Polio, 1990). Moreover, teachers were not aware of the instances in which they used L1 or supplied answers that were not confirmed by classroom data (Polio & Duff, 1994). This indicates that teachers may lack in awareness concerning their language behaviour. However, as Freeman (1989) points out, without awareness, a teacher cannot make informed decisions.

A lack of awareness concerning L1 use in language teachers has implications for teachers in training. Thus, if new teachers are to make conscious choices of when and how much they include L1 into their teaching, L1 use needs to be addressed more explicitly in teacher training. This will equip new teachers with the necessary skills to monitor their awareness and to use strategies to deal with the arising need of L1 use.

Previous studies have often taken place in language classes in which the teaching and learning of all four language skills, i.e., reading, writing, speaking, and listening, was emphasized. Activities and explanations focusing on grammar were an integral part of the syllabus. This has produced results in which the use of L1 has centred on grammar-related activities, besides other purposes such as classroom management and administrative issues. This study explored L1 use that did not contain grammar-related
teacher language. The subject of the study were two conversation courses in which grammar played no overt part.

Given the above characteristics of the research, the results of the study will not only contribute to the ongoing investigation of the role of L1 in L2 teaching but it will also provide data concerning amount, purposes, and teachers’ awareness of L1 use. Additionally, it will contribute data from the German language context, which to date has not received much attention unlike English and French teaching contexts (but see Butzkamm, 1998).

1.4 Organization of the Thesis

The thesis is organized in the following way. Chapter two provides an overview of recent and current research findings. In addition, it gives an account of the development of theoretical perspectives on the use of L1 in language teaching. Chapter three provides a description of research procedures, participants, methodology, and approach to analysis. Chapter four presents the results divided into classroom findings and a description of and comparison between the individual teachers’ perceptions and their classroom practice. Finally, chapter five provides a discussion of the research results and offers conclusions drawn from the findings. It also discusses pedagogical implications, implications for teacher training, and suggestions for further research.
Chapter 2
Background

2.1 The Use of L1 in L2 Teaching

The use of L1 in L2 teaching has been an issue of controversy that goes back to the beginning of the 20th century. With the advent of the direct method at the turn of the last century, the foundation was laid to promote an exclusion of L1 from public and language schools. This motion was supplemented by an Americanization movement that propagated an English-only policy for language and school teachers (Auerbach, 1993). Krashen’s (1981, 1983) theoretical distinction between language learning and language acquisition was another reason for the rejection of L1 use. It outlined that the subconscious acquisition of language similar to first language learning in children is preferable to explicit language instruction. The vision of language instruction which is espoused in today’s communicative approach still supports the notion of an exclusive use of L2 (Rolin-Ianziti & Brownlie, 2002). There is the attitude that if there is recourse to L1, teachers are insufficient pedagogues and experience guilt (Macaro, 2001; Chambers, 1992; Franklin, 1990).

Since the late 1970s, the debate of whether L1 has a place in second and foreign language classrooms has gained momentum and an increasing number of researchers has turned their attention toward this topic (e.g., Storch & Wigglesworth, 2003; Tang, 2002; Lin, 1990; Kharma & Hajjaj, 1989; Guthrie, 1987). In order to gain a broader understanding of the different theoretical positions that inform previous and current research, it is helpful to consider an overview of the three main views on L1 use in L2 teaching. They are known as the virtual, the maximal, and the optimal position. Macaro (1997, 2001) summarizes these three theoretical positions as follows. The virtual position
comprises the hard-liners in the field who see no pedagogical value in the use of L1. They advocate an exclusive employment of L2 by pretending that the classroom is like the target country. They believe that as long as the teacher is skilled enough, this goal can be achieved. Adherents of the maximal position similarly see no pedagogical benefit in using L1. However, they concede to the imperfect conditions of the classroom and therefore acknowledge the occasional need for recourse to L1. Lastly, the proponents of the optimal position consider the use of L1 to bear pedagogical value. They believe that it assists in the process of language learning. They advocate a reexamination of current pedagogical principles in their application to explore the benefits of L1 use (Macaro, 2001).

A further aspect that should be considered when discussing the desirability of L1 use is the difference between second language (SL) and foreign language (FL) context. In the former, students study a language in the country in which the language is spoken. Consequently, they experience an immersion situation, where the language of study also is the language in which the people of the country conduct their daily activities. Students usually arrive in the SL country with basic L2 skills, knowing that it is unlikely that teachers or others will use their L1. This is also due to the fact that students come from a variety of linguistic backgrounds and language teachers are rarely familiar with all of them. Thus, L2 inevitably becomes the language that teachers and students use for instruction and communication (Atkinson, 1993).

However, in the FL context, this scenario is different. Students encounter the FL in the classroom only. As soon as they leave class, their business with teachers, friends, and family is carried out in their mother tongue again (Artemeva, 1995). Moreover,
foreign language instructors are often not native speakers of L2 and share an L1 with their students. Even teachers who are native speakers of the FL possess a working knowledge of the students’ L1 that permits them to function as participating members of the larger society. FL learners come from all levels of linguistic competence, are often new to language learning, and have never encountered an immersion context in another country. Therefore, the question of including L1 particularly applies to the foreign language context, where instructor and students share a common language (Harbord, 1992).

Both critics and proponents of L1 use view the difference between SL and FL context as one that should be acknowledged but not be taken as an excuse to overuse L1 (Chambers, 1991). However, unlike the SL context which necessitates the use of L2, critics of L1 use consider the FL context a second-best teaching situation because teacher and students share a common language (Atkinson, 1993).

2. 2 Arguments against the Use of L1

Early proponents of the exclusive use of L2 in the classroom were Krashen and Terrell (1983), who developed the natural approach with the central component of comprehensible input. The focus of this approach was on the immersion of the learner in the second language to provide abundant opportunities for exposure to meaningful language. The theoretical basis of this approach was “that the target language system [should] largely [be] acquired rather than consciously learned, from message-oriented experience of its use” (Mitchell as cited in Chambers, 1991, p. 28).
It was assumed that language structures that are subconsciously acquired are more accessible for spontaneous communication because there is no need to search and apply consciously learned rules. It was also believed that explicitly learned grammar rules do not become “subconscious” language knowledge (Krashen, 1981). Thus, creating an L2 immersion situation in the classroom was considered the best learning environment, which meant that explicit grammar teaching and metalinguistic discussion of L2 were deemed inappropriate. Furthermore, teachers were encouraged not to use the students’ L1 in order to retain an immersion situation suitable for L2 acquisition (Rolin-Ianziti & Brownlie, 2002).

Despite the advocacy of L2 as the preferred medium of instruction, researchers and theorists usually do not insist on a 100% L2 utilization in the classroom. They particularly make concessions for students who do not have to use only L2. This is based on Krashen’s (1983) suggestion not to pressure learners to produce L2 prematurely. However, teachers are expected to use as much L2 as possible. Only in rare cases such as extreme indiscipline of younger pupils (e.g., Chambers, 1991) and in-context translation (e.g., Harbord, 1992) is L1 use considered useful. Nevertheless, the general tenor remains that L1 is undesirable, counterproductive to language learning and needs to be eliminated (e.g., Franklin, 1990). This view is often expressed as a call for the maximal use of L2 or for virtually all communication in class (e.g., Polito & Duff, 1994; Duff & Polito, 1990; Chambers, 1991).

Harbord (1992), for example, largely rejects the use of L1 in the classroom but attributes its use to several factors. The author mentions the distinction between native and non-native language instructors. He notes that the inability of non-native teachers to
conduct class entirely in L2 is due to not having received proper training in alternative strategies to communicate. Furthermore, pressure from colleagues and students not used to the English-only convention may bring non-native teachers to revert to L1. Harbord (1992) criticizes the notion of L1 serving as a time-saving device and as a tool to explain grammar, give instructions, and build rapport with students by chatting or joking in L1. Without making allowances for low-level learners, the author insists on the principle of language acquisition through L2 exposure.

Practitioners and researchers have devoted considerable effort to support their perspective on L1 use with L1 research. Franklin (1990), for example, conducted a questionnaire study showing that teachers used L1 for a variety of purposes. Franklin (1990) collected the opinions of 201 secondary school teachers of French in Scotland concerning the desirability and execution of the sole use of L2 in the classroom. She found that while 90% of respondents acknowledged the importance of teaching in L2, they also identified a hierarchy of difficulties impeding its implementation. 53% to 68% of teachers reported that it was unproblematic to carry out activities such as organizing the classroom, giving activity instructions, and chatting with pupils in L2. 38% to 53% reported that disciplining pupils, running tests, correcting written work, and explaining meanings was difficult to be done in L2. The majority of teachers (62% to 88%) indicated that teaching background, discussing language objectives, and explaining grammar was extremely difficult to do solely in L2 and preferred to use L1. When asked to rate several factors that contribute to reasons for not using L2, the majority rated the following as important in a descending order: a) behaviour of pupils, b) confidence in
speaking L2, c) class size, d) reaction of pupils to exclusive use of L2, and e) presence of many low ability pupils in the class.

From the data, Franklin (1990) identified three main factors as impediments for the exclusive use of L2: class size, mixed ability classes, and pupil indiscipline. Nevertheless, the author questions the reasons for L1 use by suggesting that they are excuses for the unsuccessful implementation of L2 use in the classroom. Franklin (1990) concludes with suggestions for changes to teaching methodology in order to conduct more group work with the help of native speaker teaching assistants. The author's findings suggest that in spite of the desire to implement L2 as the sole medium of instruction, classroom reality presents considerable challenges.

Mori (2004) also cautions against an over-simplified acceptance of the incorporation of L1 into the language classroom. The author argues that a staying-in-English rule can create valuable opportunities for the negotiation of meaning. Thus, when coupled with genuine respect for the language and culture of the learners, recourse to L1 can be avoided. This suggestion is based on a small-scale study, in which Mori (2004) analyzed classroom observations, several teacher interviews, and two video recordings of a high beginner ESL college class of adult learners. The instructor had been teaching ESL for 40 years and was bilingual in English and Spanish, the latter being the L1 of most students. Nevertheless, the instructor believed in the efficacy of a staying-in-English rule to help her students acquire L2.

Results show that the persistence of staying in English led to extended exchanges between all class participants and created genuine opportunities to communicate in English. However, the author also points out that the success and willingness of the
students to participate in these exchanges are not solely based on the plain request of
using only L2. Instead, the sustained classroom interactions in L2 were the result of the
teacher’s respect for her students’ linguistic and cultural background and her efforts to
create interesting tasks for the students.

In conclusion, critics of L1 use reject its incorporation into the language
classroom as being unnecessary and possibly harmful to language learning. Based on the
assumption that child L1 and adult L2 learning are alike, adult learners should be
immersed in L2. Recourse to L1 in class is seen as a sign of the insufficient preparation
of the teacher to use strategies for input modification. Thus, with the proper training,
teachers can and should avoid L1 use.

2. 3 Arguments for the Use of L1

Advocates of L1 use believe that a limited use of L1 can bring benefits to the L2
learning process. They provide a variety of arguments in support of their view. For
example, Anton and Camilla (1999) stress the socio-cognitive role of L1 as a device for
language learners to collect ideas in collaborative group work. Macaro (2001) and
Turnbull (2001) see the use of L1 as an important tool for lexical contrasting and time
saving. Belz (2003) approaches the subject matter from a sociolinguistic point of view
and emphasizes the connection between learner identity and L1 use in the classroom.
Chavez (2003) and Liebscher and Dailey-O’Cain (2004) regard learners’ language
alternation between L1 and L2 in class as a sign that they are immersing bilinguals.
Finally, Artemeva (1995) sees benefits of L1 use for immigrants and refugees in the process of acculturation and language learning.

An early and often-quoted advocate for the incorporation of L1 into L2 instruction is Atkinson (1987). The author criticizes the tenet of monolingualism which is inherent in communicative language teaching. He describes several purposes for which L1 can be advantageously employed and proposes a ratio of 95% L2 to 5% L1 in the classroom. Atkinson (1987) suggests that especially beginning learners benefit from the use of L1 because it provides them with the ability to truly express what they want to say with their limited language repertoire. The author further proposes to use L1 to elicit pointed L2 word translations, to check comprehension, and to give instructions for complex communicative activities. Thus, valuable class time can be spent conducting the activity in L2. Consequently, limited L1 facilitates a more focused and time-saving class practice.

In another examination of the issue, Atkinson (1993) discusses the use of L1 from three perspectives: theoretical rationale, feasibility, and desirability. With view to the theoretical rationale that calls for L2 maximization, the author questions the applicability of child language learning to adult language learning. Furthermore, the author discusses that many teachers find it unfeasible to conduct the entire class in L2 because they have received insufficient training to deal with contexts other than the second language context. Finally, Atkinson (1993) considers the desirability of the exclusive use of the L1. He argues that denying L1 use in class means denying the sociocultural identity of the learner. According to the author, this leads to alienation and “xenophobic monoculturalism rather than broadening ... horizons” (p. 4). However, using a degree of
L1 allows learners to retain a secure sense of cultural and linguistic self. This provides the chance for a less threatening exploration of the new linguistic and cultural L2 system.

Atkinson (1993) closes with suggestions for policy makers and teacher trainers. He suggests that department heads should reexamine their simplistic call for language classes to be conducted entirely in L2. He points out that variables such as course level, objective, and particular classroom activities need to be considered. At the same time, the issue of L1 use needs to gain a place in teacher training. In order for teachers to implement a high degree of L2, they need to become familiar with strategies to manage the classroom and to deal with communication problems.

Hinkel (1980) promotes a limited incorporation of L1 use into language education. He also questions the assumption that adults learn a second language best like the first language within complete immersion. He argues that particularly in foreign language instruction, the banishing of L1 creates an artificial context that is not conducive to language learning. When learners experience the target language only in the instructional context, they cannot relate to a sudden immersion situation in L2.

Hinkel (1980) suggests that L1 can serve different purposes in the process of language learning. Firstly, L1 can assist in L2 culture learning. This is due to the fact that differences in cultural etiquette often go unnoticed by learners unless they are discussed and pointed out in L1. Secondly, L1 is helpful in contrasting L1 and L2 structures to heighten learners' awareness of the linguistic similarities and differences between the two languages. This helps to foster positive transfer on the one hand and to keep in check negative transfer on the other. Hinkel (1980) closes with emphasizing that the exposure to L2 should remain paramount despite the role of L1 to aid second language learning.
Rössel (1994) allows L1 to play a role in language teaching but maintains that language instruction should take place substantially in L2. Based on the discussion of developing listening comprehension in beginning language learners, the author describes several instances in which the use of L1 can be used as a pedagogical tool. For example, L1 can be appropriate in explaining unknown vocabulary and addressing abstract concepts and subtleties in an oral piece. Otherwise, some activities would remain beyond the students’ scope if an exclusive use of L2 would be adhered to. Therefore, while Rössel (1994) assumes that L1 use decreases as L2 competence increases, she allows L1 to play a role to the extent that it facilitates the learning of L2 for beginning language learners.

Van Lier (1995) considers several arguments in favour of limited L1 use. Firstly, the author describes language learning and other types of learning as similar cognitive processes, in which newly learned items are better remembered if they can be anchored to already existing knowledge. Thus, also language learning is a process of connecting the new to the known and van Lier (1995) points out that “a rigid, artificial separation in the learner’s mind of L1 and L2 inhibits, rather than promotes, L2 acquisition” (p. 39).

Secondly, van Lier (1995) suggests to encourage students to actively investigate error sources that originate from their L1. He argues that this is more conducive to language learning than pretending L1 has no influence on the students’ L2 learning process. Thirdly, the author contends that the popular argument for maximum exposure to L2 fails to consider that increased exposure to L2 does not necessarily lead to increased L2 learning. Instead of quantity, van Lier (1995) asserts that quality of L2 exposure is significant. This is because it determines the learners’ access to and engagement with the
language. Finally, van Lier (1995) recommends that teachers and students address and negotiate the amount and purposes of L1 use in the classroom so that both teacher and students are responsible for monitoring their language use.

Based on the Japanese EFL context, Schmidt (1995) offers an account of scenarios where the use of the L1 can be helpful. For example, using L1 in mixed-level classes can be a way to keep lower-proficiency students on track as to the progression of the lesson. Furthermore, allowing students to use L1 for the genuine expression of mind and as a brainstorming tool often leads to a more fruitful formation of ideas than relying solely on their limited L2 knowledge. This linguistic freedom also has positive effects on student motivation and student-teacher relationships. In addition, with respect to the reality of the Japanese school system in which translation sections are an integral part of college entrance exams, using translation activities prepares students for their future academic careers.

Nevertheless, in spite of his advocacy of L1 use, Schmidt (1995) does not fail to point out the downfall of an overuse of the first language. He emphasizes that teachers should make an effort to wean students from the habit of getting a translation for everything not understood; otherwise, students may stop trying to understand the instructor’s L2 altogether. The author remarks that students need to grasp that L2 is not simply a subject matter that needs to be translated in order to be interpreted as meaningful. Instead, students need to develop the intuition that L2 in itself is a medium for genuine communication and the expression of self.

Some take a critical stance toward the exclusive use of L2 in the language classroom. Authors like Cook (1999, 2001) and Belz (2003) stress that the L2-only
doctrine has idealized the concept of being a native speaker in language teaching. This has taken place to such an extent that simply by virtue of not being born a native speaker of L2, attainment of L2 is forever out of reach of the average language learner. Similarly, due to the inherent inability to "become" a native speaker, learners are haunted by the notion of the L1-using, "deficient" language learner. They feel guilty for using L1 because professionals interpret its use as a lack of language learning success. Thus, in the above mentioned authors' opinions, the attention in language learning should be shifted from the native speaker to the language learner and L1 should be recognized as a valuable resource in the classroom.

Others go even a step further and make the use of L1 in ESL a matter that is political rather pedagogical. Auerbach (1993), for example, traces the beginning of the English-only axiom in ESL teaching to the beginning of the 20th century. At that time, the influx of immigrants and the advent of the first World War contributed to the emergence of an Americanization movement. As a result, bilingual education declined and gatekeeping practices were established to ensure that only native speakers of English were allowed to hold teaching positions. Consequently, school teachers remained monolingual English speakers unable to empathize with non-anglophone students.

The author contends that because of the ideological roots of the English-only practice, relations of power concerning the linguistic status of both teachers and learners need to be taken into account when considering the issue. Auerbach (1993) recommends to look below the surface of existing taken-for-granted practices that native speakers are the better teachers. She suggests that this simple rule of thumb continues to reinforce the
uncritical acceptance of L2-only practices and ignores valuable traits of expertise such as cultural sensitivity that multilingual speakers bring to the ESL profession.

Thus, proponents of L1 use argue for the benefits of limited L1 use from a variety of perspectives. They refer to the pedagogical and motivational benefits for the students, the immerging bilingual identity of the learners, and the political history of L2-only instruction. Proponents of L1 use do not call for an overwhelming amount of L1 in L2 teaching. However, they suggest to consider the many variables that intersect in a language classroom and to adjust moderate levels of L1 to student level, learning context, and student goals.

As can be noted from the literature reviewed above, growing support has come from theorists and practitioners for a limited incorporation of L1 into L2 teaching. However, a strong tendency remains in language teaching to adhere to the axiom of L2-only practice. The controversy surrounding L1 use has led to an increasing interest in the topic and consequently, a number of research studies has been conducted in recent years to investigate the use of L1 in language classrooms. The following section provides a review of these studies.

2. 4 Empirical Studies on the Use of L1 in L2 Classrooms

As the debate continues among theorists and practitioners concerning the desirability of L1 use in language instruction, researchers have expanded their investigation of the issue in language classrooms. They have explored the amount of L1 used by teachers and students as well as the purposes for which practitioners and students
employ L1. Furthermore, researchers have investigated the attitudes and perceptions of teachers and students regarding the role of L1 (e.g., Mpras, 2003; Macaro, 2001).

Research that has investigated the amount of L1 use in various classroom contexts has revealed a wide variability of L1 use in teaching practice. For example, in a study of 13 first-year, second-quarter foreign language classes taught at the University of California, Duff and Polio (1990) found a distribution of L1 that ranged from 0 % to 90 %. 6 of the 13 teachers used L1 10 % or less of the time. At a university in Australia, Rolin-Ianziti and Brownlie (2002) found an average of 8.8 % and a range from 0 % to 18.1 % L1 use in five first-year French courses. The researchers ascribed the general low use of L1 to the fact that the courses were based on the same course material and that data were collected at the same point during the semester. In a Polish secondary school setting, Nizegorodcew (1996) found an average of 14 % and 11 % of L1 use by limited proficiency learners of English and their teacher, respectively. Finally, a case study of six student teachers of French instructing teenagers across four state schools in southern England found a low use of L1 that ranged between 0 % to 15.2 %, with an average of 6.9 %. It was also found that there was no correlation between the amount of L1 used by teachers and the use of L1 or L2 by students (Macaro, 2001).

Results from a study at a Japanese high school of 12 English classes revealed a much higher degree of L1 use. Kaneko (1992) found that teachers and students used L1 51 % to 74 % of senior classes and 64 % to 83 % of junior classes. The author attributes the high average of 71 % of total utterance time in L1 to the fact that both teachers and students shared the same mother tongue. The author concludes that higher use of L1 is
connected to lower-proficiency levels and that variables such as teaching context, course content, and teacher differences contribute to the variability found.

Results of research studies that have investigated the purposes of L1 use have found recurrent themes for which L1 is used in class. L1 is most often employed for explaining grammar, giving activity instructions, building rapport between teacher and students, and generally for making input comprehensible by providing translations. Depending on individual classrooms and teaching contexts, the ranking of the themes vary. Furthermore, due to different approaches of investigating L1 purposes, studies have grouped and named purposes differently, while some have also quantified their distribution.

For example, Polio and Duff (1994) found that teachers most commonly used L1 for administrative vocabulary, i.e., teachers incorporated words such as midterm, review, or quiz into an L2 utterance. Moreover, teachers used L1 to give grammar instructions, to manage the class, and to show solidarity with the students. Brownlie and Rolin-Ianziti (2002) confirmed an increase of L1 use during grammar-focused activities. They also found that the type of activity had an impact on the language being used. Often, teachers’ language alternation was triggered by student requests that were spoken in L1. A study that investigated the purposes of L1 use in three undergraduate French classes at Ohio State University showed that L1 was used for the five purposes of translating, practicing discovery and rote learning, explaining a teaching point, bridging a communication gap, and enhancing students’ reflection (Nzwanga, 2000).

In a Japanese secondary school EFL context, Kaneko (1992) found that an average of 44% of L1 utterances were aimed at the pedagogical purpose of the lesson
and included explanations and activity instructions. 15% of L1 utterances pertained to the organizational necessities and management of the lesson, and 5% of utterances were aimed at building rapport with the students. In a Chinese university EFL context, Tang (2002) discovered that the main purposes for which L1 was used were aimed at giving activity instructions and explaining abstract or culturally specific words. To a lesser degree, teachers also used L1 to explain complex ideas and grammar rules.

Besides investigating the use of L1 based on data gathered in the classroom, some studies have explored teachers’ and students’ perceptions of L1 use. Research instruments like participant interviews and questionnaires have enabled researchers to gain a better understanding of perceptions concerning amount and purposes of L1 use. They have examined the attitudes among teachers and students concerning the desirability of L1 use and the factors that prompt pedagogues to resort to L1. However, only few studies have made the comparison between teacher perceptions and actual events in the classroom.

For example, Duff and Polio (1990) interviewed participating teachers as part of their classroom study in 13 language classes and found common reasons why the teachers used L1. The instructors mentioned elements such as departmental policies on L1 use, degree of relatedness of L1 and L2, and the teachers’ own experiences as language learners. Furthermore, teachers stated that the language used in the course textbook had an impact on the language that they used for grammar instruction. Finally, teachers also distinguished between second and foreign language learning and believed that the latter did not necessarily call for a complete immersion of students in L2. However, when the authors related teacher interview statements to data collected in the classrooms, they
found a considerable mismatch between teachers' reports on when and how much they used L1. Specifically, teachers underestimated their L1 use by up to 35% and mentioned purposes of L1 use which could not be confirmed by the data recorded in their classrooms. These findings point to a lack of teachers' awareness of their language use.

As part of a study in the English public school context, Macaro (2001) interviewed six student teachers of French. He discovered that the teachers found L1 to be particularly useful for giving procedural instructions to set up L2 activities and for reprimanding students. Nevertheless, the student teachers differed in their beliefs concerning the desirability of L1 use. Some showed greater inner conflict relating to its use because national curricular standards ordered an exclusion of L1. Others were more influenced by inner beliefs in the pedagogical usefulness of L1. Thus, for the former, the principle of avoiding L1 appeared to be an overriding parameter that stifled self-reflection. For the latter, the employment of L1 was a conscious and justified means to an end. It ensured pupil comprehension and helped setting up communicative activities for students to practice L2 extensively.

In a Chinese EFL context, Tang (2002) carried out teacher interviews and found that teachers valued the use of L1 for clarifying complicated words, which was less time-consuming and thus allowed more time for students to communicate in L2. Additionally, there was agreement across teachers that with rising proficiency level, there was diminished need to use L1 in class. Results from the teacher and student questionnaires showed that 70% of students and 72% of teachers believed that L1 should have a place in the English language classroom, especially to clarify new vocabulary and complex grammar points. Nevertheless, although both students and teachers believed L1 to play a
facilitative role in L2 instruction, there was no tendency of wishing to increase L1 use at the cost of L2.

In a study at the University of Puerto Rico, Schweers (1999) explored the attitudes and perceptions of teachers and students concerning the use of L1 in English classes. The author collected questionnaires from instructors and students and carried out interviews with the teachers. He found that the majority of students wished for language instruction to contain 10% to 40% L1 and felt that it helped them learn L2 better by making them feel less lost during the lesson. Schweers (1999) also found that all teachers reported that they used L1 to some degree. An average of 10% to 22% of teachers viewed the use of L1 as appropriate to explain difficult concepts, to joke with students, to check comprehension, and to define new vocabulary items. In addition, teachers believed that by modeling bilingualism firsthand and by showing that English and Spanish could coexist, L1 use reduced students' resentment against the obligation of having to learn L2. This was particularly important in Puerto Rico's socio-linguistic context, where English had been imposed as an official language.

In a questionnaire survey with semi-structured interviews of 21 upper-school Italian teachers of English, Macaro (1995) investigated attitudes and perceptions regarding L1 use. He found that all teachers considered both the students' proficiency level as well as the instructor's proficiency level in L2 a decisive factor in how much L2 could be used in class. Furthermore, teachers agreed that it was acceptable to resort to L1 for giving complicated instructions, praising students, and making them feel comfortable rather than insisting upon the exclusive use of L2. At the same time, teachers felt that
grammar instruction could be carried out in L2 unless equivalent grammatical terms did not exist in the students’ L1.

Mpras (2003) carried out a study examining the attitudes and behaviours of 15 teachers concerning the desirability of L1 use at a US high school with a 50% immigrant population. The author determined from the interview data that the majority of participating teachers allowed and encouraged the use of L1 in their classrooms. The rest respected the students’ prior linguistic knowledge and condoned its use for checking comprehension. All except one teacher had definite ideas about when L1 use was appropriate and inappropriate. The pedagogues deemed five areas of L1 use as inappropriate: a) during certain graded activities, b) when translations were believed to be excessive, c) when students were exclusionary, d) when students were being rude, and e) when it jeopardized safety concerns. Teachers identified three areas of appropriate L1 use: a) translation to clarify concepts, b) cooperative learning situations, and c) social conversation.

Lastly, Levine (2003) carried out an internet-based questionnaire study that collected the opinions of 163 first-year and second-year instructors and 600 first-year and second-year students of French, Spanish, and German on the use of L1. Results revealed that over half of the students (60%) perceived their instructors to use L1 between 0% and 20% of the time in class, whereas 44% of instructors made the same reply. Furthermore, while 24% of students estimated their instructors to use L1 between 20% and 40% of the time, 30% of instructors offered the same estimation. Concerning the contexts of L1 use, 28% of students and 53% of instructors believed that L1 was used 0% to 20% of the time during topic or theme-based activities such as workbook
exercises. For discussions and explanations of grammar usage, 26% of teachers estimated L1 to be used 0% to 20% of the time, whereas 11% of students were of the same opinion. For the discussion of tests and other managerial issues, the amount of estimated L1 use was high. A quarter of students and teachers approximated the use of L1 to be between 80% to 100%. Another quarter of students and teachers estimated the use of L1 to be between 60% and 80%. Although these results are not based on an empirical in-class data collection, they confirm a trend that has been suggested in previous in-class studies. Thus, while L2 is overwhelmingly used for core pedagogical activities, L1 is often resorted to when explaining grammar and managing the class. Finally, it is interesting to note that Levine’s (2003) study failed to confirm the hypothesized positive relationship between increased L2 use and student anxiety.

In conclusion, research into teacher and student attitudes concerning the use of L1 has revealed that both teachers and students have concrete opinions about the incorporation of L1 into language classes. Teachers value the recourse to L1 to clarify teaching points in order for students to spend more time practicing L2. Students appreciate occasional L1 use by the teacher to make them feel more informed and comfortable with classroom events and the language learning process. However, both teachers and students welcome a decrease in L1 use as the students’ proficiency in L2 increases.
2. 5 Summary and Research Problem

This chapter provided an overview of theoretical and practical arguments for and against the use of L1 in language teaching. Moreover, it reported on qualitative and quantitative studies to date. Some research studies have explored classroom practice by investigating the amount and the purposes for which L1 is employed (e.g., Tang, 2002; Rolin-Ianziti & Brownlie, 2002; Macaro, 2001; Nizegorodcew, 1996; Kaneko, 1992; Duff & Polio, 1990). They have found variability with respect to the amount of L1 in teacher talk, which suggests that teaching context and student and teacher differences have an impact on how much L1 is used in class. Studies that looked at the purposes for which L1 is used have found that L1 use centres on grammar instruction, classroom management, and building rapport with students.

Other studies have been concerned with teacher and student perceptions and attitudes of L1 use in the classroom (e.g., Mpras, 2003; Levine, 2003; Schweers, 1999; Macaro, 1995; Duff & Polio, 1990). They have found that both teachers and students welcome a limited use of L1 into the language classroom. Teachers consider its use as a time-saving device to clarify teaching points and to generate more time for students to communicate in L2. Students appreciate their teachers’ recourse to L1 as a way to make them feel more comfortable and less lost in the language learning process.

While research has concerned itself with language teaching practice, few studies have made the connection between what teachers think about using L1 and what they do in their classroom practice. When Polio and Duff (1994) compared background teacher interviews with data collected in their language classrooms, they found that teachers had underestimated their L1 use by up to 35%. Teachers had also reported using L1 for
purposes that could not be confirmed by recordings of their classes. This discrepancy between teacher perceptions of L1 use and their classroom practice may point to a lack of awareness of their language use. As few research studies have investigated the relationship between teacher perceptions of L1 use and their practice, the present study was designed to address this gap in the literature. By comparing two teachers’ perceptions of the amount and purposes of L1 use with data collected in their classrooms, the present study showed the extent to which teachers were aware of L1 use in their own teaching. The study provided empirical data on the distribution and purposes of L1 use in foreign language classrooms. Furthermore, it compared the thoughts and practice of an experienced and inexperienced language teacher. Consequently, for the purpose of this study, the following research questions have been formulated:

2.6 Research Questions

Research Questions:

1. To what extent do the participating teachers use L1 in their L2 classrooms?
2. For what purposes do they use L1?
3. To what extent are they aware of the amount and the purposes of their L1 use in their L2 classrooms?
4. Are there any differences in L1 use between the two teachers? If there are any, what could be the sources of the differences?
Chapter 3
Methodology

3.1 Method and Materials

The present study was carried out in the spring semester of 2005 at the University of Victoria (UVic), Canada. The project was conducted by the author and did not include the participation of other assistants. Data collection, transcription, coding, and analysis were carried out by the author.

Two sections of a second-year German course were recorded with a digital video camera placed in the back and a digital audio recorder in the front of the class. A total of 400 minutes (eight recordings of 50 minutes, four per course section) were recorded, which were transcribed and coded.

Subsequent to the classroom data recordings, the teachers participated individually in an interview and a stimulated recall session. The purpose of the interview was to solicit the teachers' attitudes toward the use of L1 and their perceptions of the amount and the purposes for which they used L1 in their teaching. In the stimulated recall session, the teachers watched selected episodes of L1 use from their teaching and commented on them. This procedure was aimed at eliciting the teachers' thoughts on why they had used L1 during classroom practice. The interviews and stimulated recall sessions were audio recorded and transcribed for analysis.
3. 2 Setting

Two second-year German courses at UVic were the subject of the study. The second-year courses were chosen because they were expected to yield the most diverse and unpredictable L1 use. Based on previous classroom observations of German classes, L1 and grammar-related discourse dominated the classroom talk in first-year level courses. Therefore, they were not an option. The third-year conversational course was an option but only one course of this kind was offered. Thus, no opportunity existed to analyze two courses of the same level as was the case with the two second-year courses. Finally, the fourth-year level course was described in the course outline as taking place entirely in the target language and therefore was not suited for the planned research. Due to the difference in teaching experience of the two instructors that were assigned to teach the two course sections, the second-year conversation classes made it possible to contrast the use of L1 between an experienced and inexperienced teacher.

The two sections of the German course were held in different time slots throughout the week. They were taught by two different teachers, henceforth referred to as Teacher A and Teacher B. Teacher A taught the section which took place twice a week with 1.5 hour classes. Teacher B taught the other section three times a week for one hour. It was customary for lessons to end ten minutes prior to the official end so that the next class could enter the classroom. To make up for the teachers’ different class schedules, Teacher A’s classes were recorded starting half an hour into the lesson while Teacher B’s classes were recorded in entirety. Thus, both classes were recorded four times for 50 minutes in order to obtain equal class time.
The instructors were not informed of the focus of the study in order not to influence their use and attitudes concerning the use of L1. After receiving the approval of the Human research ethics board, the teachers were contacted and the subject matter of the study was introduced to them in general terms. Its title was presented as “Approaches to teaching German in an English-speaking environment”. After the conclusion of the data collection, each teacher was informed about the actual focus of the study and was offered a copy of the thesis after the completion of all work.

The courses’ objectives were described in the course syllabus as “the acquisition of oral proficiency, expansion of vocabulary, syntax and idiom, and gaining insights into the culture of Germany” (Department of Germanic and Russian Studies, 2004, p. 8). They contained the topics of family, stereotypes, cities, genders, music, film, multiculturalism, art, change, and humour.

The conversation course was a parallel course to another second-year grammar-centred course taking place during the semester. The conversation course was the first of its kind for the students, i.e., there was no such course available at the first-year level. Thus, the format of the course offered a first chance for students to apply what they had learned in the grammar-centred courses of the first year.

3. 3 Participants

3.3. 1 Teacher A and Teacher B

Teacher A was a 48-year old male and a native speaker of German. He had lived and taught German in Canada for 20 years. He spoke English fluently, also knew French
and Latin, and had a doctoral degree in German. He had always taught in university settings and had been an instructor of German at all levels. During the time the study was carried out, he was teaching one section of the conversation course, which took place twice a week for 1.5 hours.

Teacher B was a 23-year old female student teacher and a native speaker of German, who usually resided in Germany. Her teaching at UVic was part of a two-semester practicum required for the completion of her Master’s teaching degree at a German university. Teacher B was fluent in English and had basic knowledge of French, Spanish, and Russian. She had taught German to immigrants at a beginner level as part of a practicum for several weeks at a private institution in Germany. At the time of completion of the data collection in mid-April 2005, Teacher B had taught German for eight months at a first- and second-year level in an English-speaking environment, i.e., at UVic. During the time the study was carried out, she was teaching the conversation course subject of this study and a grammar-focused first-year level course.

3.3. 2 Students

There were 18 students in each class. Their ages ranged from 18 to 55. The majority of students were in their early twenties and had entered university after high school. Most students had grown up in Canada and only four students in both classes were exchange students from other countries. The majority of students were familiar with another language besides English and German. Previous experience with learning German ranged from two months to seven years. The majority of the students had studied
German in the past either as part of family heritage or in previous courses. Five students in Teacher A’s class and three students in Teacher B’s class had studied German between one and twelve months in Germany. 47% of students indicated that they were interested in learning German because they wanted to travel and improve their life skills in a German-speaking setting. 22% of students wanted to learn German because they were interested in the language. 16% of students expressed interest in pursuing a university program in a German-speaking environment or making it the focus of their academic career at home.

3. 4 Data Collection

The data collection began mid-January 2005 of the spring semester. Classroom recordings were completed by the end of March and the teacher interviews and stimulated recall sessions were concluded by mid-April 2005.

3.4. 1 Classroom Recordings

The selection of the classes that were to be recorded took place in consultation with the teachers based on two criteria. No recordings were scheduled for a day on which a test was to be administered. Recordings were arranged in such a way that they would take place during lessons when the teachers presented the same course material.

The lessons were recorded with a digital video recorder at the back of the class and a digital audio recorder placed in the front of the class to capture as much teacher talk
as possible. The recording devices were set up as the teacher prepared for the lesson in class and recording began when the teacher addressed the class as a whole and thus began the lesson. Recording was stopped at the end of the lesson when the teacher addressed the students to adjourn the class.

3.4. 2 Teacher Interviews

Once classroom recordings had been completed, individual interviews were scheduled with the teachers. As mentioned earlier, the purpose of the interviews was to elicit the teachers' perceptions of their L1 use. The interviews took place after the completion of classroom recordings in order not to influence the teachers' practice with the interview questions. A set of questions guided the interviews. The questions were aimed at eliciting the teachers' attitudes concerning L1 use as well as estimates of the amount and the purposes for which they used L1 in their teaching (see Appendix A for full set of questions). As the researcher and the teachers were native speakers of German, the interviews were conducted mostly in German but contained occasional recourse to English. The interviews were audio recorded, transcribed, and translated back to English.

3.4. 3 Stimulated Recall Sessions

The purpose of the stimulated recall sessions was to collect data on the teachers' reasoning of why they used L1 during teaching moments. This was done by showing each teacher 20 selected episodes of L1 use from their teaching. Stimulated recall is an
introspective and retrospective research instrument that is used to gather thoughts of participants about a recent action they partook in. It is a tool which explores the thought processes of an individual during an activity by presenting the participant with an audio or visual recording of themselves doing the task. It is thought that the stimulus prompts the recall of the thoughts that occurred during the moment of activity (Gass & Mackey, 2000; Calderhead, 1981).

Several factors were considered in the process of choosing the episodes that were to be shown in the stimulated recall sessions. Due to the fact that “one’s memory becomes less accurate as time passes” (Gass & Mackey, 2000, p. 89), it was important to minimize the elapsed time between classroom recordings and the stimulated recall sessions. Furthermore, the content of the episodes, the total length of the stimulated recall procedure, and the participants’ experience of the stimulated recall session needed to be considered.

Before choosing L1 episodes from the large data pool that had been recorded, the data needed to be transcribed (refer to section 3.5 for a detailed account of the transcription procedure). After the transcription of the eight recorded classes, all episodes in which the teachers had used L1 were highlighted across the transcripts. The L1 episodes ranged from one word articulations to short monologues.

During a perusal of the L1 episodes, it became apparent that the purposes of the majority of L1 episodes were easily identifiable. However, the purposes of a small number of episodes were less apparent and lent themselves to the teachers’ comments on the reason they had used L1 during that moment.
A further consideration that affected the choice of episodes was the total length of the episodes and its relation to the time participants would spend commenting on them. It was planned to stop after each L1 episode and to ask the teachers why they had used L1 during that moment. Therefore, it was important not to underestimate the time the procedure would take. As Gass and Mackey (2000) point out, “participant fatigue is clearly an issue” (p. 85). Thus, it was determined to aim for a total session time of approximately one hour and to include 20 episodes from each teacher’s recordings. The 20 episodes of each teacher were burned on a disc with a length of ca. 11 minutes of recordings for Teacher A and Teacher B.

Two weeks after the last classroom recording, the stimulated recall sessions were conducted with the individual teachers. The sessions began with reading a prepared text to the teachers, which explained the background and reasoning of the procedure and described what was expected of them. This was done to create a situation that would be as similar as possible for both participants (Gass & Mackey, 2000). Then, the individual teachers were shown the 20 episodes. After each episode, the disc was stopped and the teachers were asked why they had used L1 during that moment. The teachers also had access to the transcripts of the classroom recordings for when the audio signal of the recording was not clear. The stimulated recall sessions were conducted in German, audio recorded, and translated back to English.
3.5 Data Analysis

The data analysis took place in the following manner. Transcription and analysis of the data were based on a computer program called CHILDES (Child Language Data Exchange System). CHILDES is a program that was designed to carry out conversational discourse and language learning-related research. It was launched in 1984 with Brian MacWhinney and Catherine Snow as co-directors of the program. CHILDES comprises three tools: The CHAT program (Codes for the Human Analysis of Transcripts), the CLAN program (Computerized Language Analyses), and a data base. CHAT is a subsystem of CHILDES to transcribe human language. It is defined by a set of conventions, which capture varying degrees of language detail, depending on the research focus. CLAN provides a variety of search queries that can be run on the transcribed data. For example, the frequency of a word can be determined or combinations of language-related research interests can be searched for. Finally, a database is part of the CHILDES system that comprises language data that have been donated over time to the system from researchers that have used its devices (MacWhinney, 1994).

The transcription procedure took place while watching and listening to the video recordings of the teachers’ classes. Contextual information was included in the transcription when it helped to make sense of classroom events. Whenever the audio signal of the video was insufficient, the audio recordings made during the same lesson were resorted to. Nevertheless, there remained instances in which parts of the teachers’ and students’ speech were inaudible.

The transcription of the recorded data included all audible teacher speech directed at the class. This included announcements and comments at the beginning of class as
soon as the teacher addressed the entire class. These instances of L1 use were included as they were seen to represent an integral part of the foreign language classroom (see Appendix C and D for samples of transcripts of Teacher A and Teacher B).

The data were transcribed in the CHAT program based on the basic number of transcription conventions available. One of the conventions allowed marking all L1 words by adding the symbol @s to the end of these words. This convention made it possible for the CLAN program to distinguish later between English and German words and to perform a frequency count of all words and of all L1 words spoken by the teachers.

Two additional transcription conventions were adopted in order to capture the most precise reflection of the amount of words spoken in the respective languages. Firstly, contractions in English and German were transcribed as full words. This convention was adopted because the teachers rarely used contractions in their speech while speaking German but used them abundantly while speaking English. Naturally, this was due to the lack of need for the teachers to articulate English extensively as it was the students’ L1. In order to eliminate this difference, contractions in the teachers’ speech were written in separate words in both English and German.

Secondly, noun phrases in English consisting of two words where transcribed as one when the equivalent German translation was also spelled as one word. This convention was adopted to regularize some differences between English and German orthography and to represent word boundaries similarly across both languages. German links words together to form noun phrases that comprise between two to theoretically an endless number of words to express a unit of meaning. They are written as long words.
English, on the other hand, writes words separately that are linked in a shared meaning, e.g., *Verschwörungstheorie* 'conspiracy theory'. Thus, noun phrases consisting of two words in English were written as one word when the German counterpart was also expressed orthographically as one word (see Appendix B for the set of transcription conventions used in the present study).

In order to ensure consistency in transcription, the CHAT program includes a subprogram called CHECK that allows the transcriber to ascertain adherence to CHAT standards. The CHECK program was used throughout the data transcription to ensure that all transcription conventions were used correctly. This assured that CLAN queries would later produce reliable results. Nevertheless, the CHECK program was unable to see whether the transcription conventions of tagging all English words with @s and writing two English nouns as one when applicable were consistently used. The transcripts were double-checked during many occasions of rereading and listening to the recorded data to ensure the application of the conventions throughout the data. Furthermore, after the completion of the transcription when working with paper copies of the transcripts, a few last instances were found in which the application of the two conventions had been overlooked. These changes were added to the transcriptions in the CHAT program.

3.5. 1 Determining the Amount of L1 Use

The word count procedure was used to measure the number of English and German words that had occurred in the teachers’ classroom talk. This was done to calculate the ratio of L1 and L2 use. Counting words was seen as the most appropriate
method based on the close genetic relationship that exists between English and German. Both languages are part of the West Germanic section of the Germanic family, which is one of the nine branches of the Indo-European language family (O’Grady & Archibald, 2000).

The CLAN program carried out a frequency count of the total of words and of L1 words only. Then, the total of L1 words was subtracted from the total of words to gain the total of L2 words. These calculations were made for each class of the two teachers as well as across all classes. The number of words was then calculated in terms of percentages.

3.5. 2 Determining the Purposes of L1 Use

The first step in determining the purposes of L1 use was the identification of all L1 episodes across the eight transcripts. An episode of L1 use was any occasion a teacher used L1. L1 episodes varied with respect to length and nature and ranged from one L1 word to several L1 sentences said by a teacher in one articulation. To make the L1 data comparable in length for the coding according to purpose, several criteria were adopted to divide the L1 data into units of analysis called L1 utterance.

Following Mackey, Oliver, and Leeman (2003), an L1 utterance was defined as “a stream of speech with at least one of the following characteristics: a) occurring under one intonation contour, b) bounded by a pause, and c) constituting a single semantic unit” (p. 45). In addition, if classroom interaction is considered a dialogue between the teacher and students, their exchanges can be considered conversational turns. A student’s turn,
ending or interrupting a teacher’s turn in which L1 had been used, was a turn boundary and acted as an utterance delimiter for the previous L1 utterance.

In the following transcription extract from Teacher B, the teacher’s (T) turn is delimited by a following student’s (S) turn. The teacher’s L1 episode is comprised of three L1 utterances, each one presented here as a new teacher’s line. The first utterance is a translation of a vocabulary item. The following two L1 utterances are an elaboration of the initial explanation, each constituting a separate semantic unit.

T: Stecher kommt von stechen [Stabber comes from stabbing], meaning to stab someone with a knife.
T: That means if you use a knife, you put it somewhere, man sticht [one stabs].
T: The activity, using the knife to putting it in.
S: Stabber.

The second step in determining the purposes of L1 utterances was the development of a coding scheme to categorize the purposes of L1 utterances. The coding scheme used in Rolin-Ianziti and Brownlie’s (2002) study provided a departure point. During the process of working with the L1 data, the scheme was modified and elaborated to reflect the purposes that were present in the data. As the L1 utterances were entered into a database, their purposes were considered and modifications to the coding scheme were made. This was followed by another perusal of the L1 utterances and their purposes, in which final refinements were made to the coding scheme. In its final version, the coding scheme contained 14 main functional categories.
Coding Scheme of L1 Utterances

1. Translation
   a) Content-based
   b) Function-based
2. L1-L2 contrast
3. Evaluation
4. Activity instruction
5. Activity objective
6. Elicitation of student contribution
7. Personal comment
8. Comprehension check
9. Classroom equipment
10. Administrative issues
    a) Test/exam
    b) Announcement
11. Repetition of student L1 utterance
12. Reaction to student question
13. Humour
14. Teacher as bilingual
    a) Arbitrary code mixing
    b) L1 words of L1 culture

The first category of the coding scheme was Translation. This category captured L1 utterances that were translations of previous L2 articulations. Sometimes a translation was simply a translation and was used to clarify the content of a previous L2 articulation. These translations were called content-based translations. An L1 utterance which was a translation of a previous L2 articulation and which also served another classroom purpose was called a function-based translation. These translations were further coded in terms of the purposes they served.

The second category of L1-L2 contrast captured comments the teachers made to contrast L2 forms or cultural concepts with L1 forms or concepts. The category of Evaluation contained feedback to the students as well as comments of praise or dissatisfaction. The categories of Activity instruction, Activity objective, Elicitation of
student contribution, Comprehension check as well as Classroom equipment are self-explanatory.

The category of Personal comment comprised utterances that were a reaction of the teacher to something a student had said or done or to the topic that was being currently discussed in class. These comments can be interpreted as the teacher expressing his or her personal take on events in the classroom. In other words, the teacher contributes to the classroom proceedings by adding a personal comment.

The next category was Administrative issues and encompassed the subcategories of Test/exams and Announcements. A further category was Repetition of student L1 utterance. This category comprised L1 utterances that were initially spoken by a student and repeated by the teacher. These L1 utterances were elicited translations of language items to ensure students’ comprehension thereof. The category of Reaction to student question captured L1 utterances the teacher produced in response to a student question. These questions were sometimes a request for translation or a question about L2 that the teacher chose to answer in L1. No distinction was made as to whether the student had asked the question in L1 or L2.

Furthermore, there was the category of Humour, which contained utterances in which the teacher made a joke. Lastly, there was the category of Teacher as bilingual. This category included two subcategories. Arbitrary codemixing captured instances of the teacher mixing L1 and L2 words randomly and included false starts in L1. L1 words from L1 culture encompassed L1 words from the larger L1 culture that the teacher incorporated into L2 speech. Table 1 provides examples of the functional categories.
Table 1
Examples of Functional Categories

<table>
<thead>
<tr>
<th>Functional category</th>
<th>Example from L1 data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. a) Translation, content-based</td>
<td>T: Anpassung ja oder nein [Assimilation yes or no]. Gibt es eine Anpassung, gibt es keine Anpassung [Is there assimilation, is there no assimilation]. Is there assimilation or is there no assimilation.</td>
</tr>
<tr>
<td>- Teacher B</td>
<td></td>
</tr>
<tr>
<td>1. b) Translation, function-based: Activity instruction</td>
<td>T: Also lest euch das bitte durch [So read it through please]. Read it through.</td>
</tr>
<tr>
<td>- Teacher A</td>
<td></td>
</tr>
<tr>
<td>2. L1-L2 contrast</td>
<td>T: Im englischen ist das so, wie würdet ihr, Winona Ryder, wie würdet ihr die bezeichnen als actor oder als actress [in English it is like, how would you Winona Ryder, how would you label her, as actor or actress]?</td>
</tr>
<tr>
<td>- Teacher A</td>
<td></td>
</tr>
<tr>
<td>3. Evaluation</td>
<td>T: Ja, das wäre schön, aber es ist leider Ausländerfeindlichkeit, keine Freundlichkeit [Yes, that would be nice but unfortunately it is hostility against foreigners, not friendliness] good.</td>
</tr>
<tr>
<td>- Teacher A</td>
<td></td>
</tr>
<tr>
<td>- Teacher B</td>
<td></td>
</tr>
<tr>
<td>5. Activity objective</td>
<td>T: Und vielleicht können wir das kurz durch, den Wortschatz [And maybe we can quickly through, the vocabulary], so that you have all heard it or so. Ich lese ein paar [I read a few].</td>
</tr>
<tr>
<td>- Teacher A</td>
<td></td>
</tr>
<tr>
<td>6. Elicitation of student contribution</td>
<td>T: Gibt es im Englischen Formen von Sexismus in der Sprache [Are there forms of sexism in the language]? Werden Frauen benachteiligt wenn man sich Worte anguckt [Are women disadvantaged when you look at words]? Also zum Beispiel [So for example], the word student, does it include any form of sexism if you look at this?</td>
</tr>
<tr>
<td>- Teacher B</td>
<td></td>
</tr>
</tbody>
</table>

(table continues)
<table>
<thead>
<tr>
<th>Functional category</th>
<th>Example from L1 data</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Personal comment</td>
<td>T: Hier, ist etwas unscharf, aber hier ist sie (Lou Andreas Salome) mit Nietzsche und einem, wie heisst der Mann, ein Freund, und sie hat eine Peitsche in der Hand [Here, a little out of focus, but here she is (Lou Andreas Salome) with Nietzsche and a, what is this man called, a friend, and she has a whip in hand]. <strong>Perfect photograph.</strong></td>
</tr>
<tr>
<td>- Teacher A</td>
<td></td>
</tr>
<tr>
<td>8. Comprehension check</td>
<td>T: Und wenn sie das Geld nicht mehr brauchen, müssten sie es für ein anderes Thema, ein anderes Projekt benutzen [And if they don't need the money anymore, they would have to use it for another topic, a different project]. Und das wäre dann aber gegen die Interessen des Spenders [And that would be against the intention of the donor]. <strong>Do you understand that?</strong></td>
</tr>
<tr>
<td>- Teacher B</td>
<td></td>
</tr>
<tr>
<td>9. Classroom equipment</td>
<td>(The data projector does not work.)</td>
</tr>
<tr>
<td>- Teacher B</td>
<td>T: <em>I just tried to restart maybe it works then again.</em> In der Zwischenzeit könnt ihr schon mal einen Blick auf das letzte Blatt werfen [In the meantime, you can have a look at the last sheet].</td>
</tr>
<tr>
<td>10. a) Administrative issues: Test/exam</td>
<td>T: <em>We will write the vocab test on Tuesday after Easter. We postpone it from Friday which does not exist as a class for us to Tuesday after Easter and after learning Kunst, Wende [art, change] and Film. Maybe we can, this way you bring on Wednesday before Easter all your vocab sheets with you and we will have a look at all the vocab. So you know what you have to learn, okay? Is that fine with you? Perfect.</em></td>
</tr>
<tr>
<td>- Teacher B</td>
<td></td>
</tr>
<tr>
<td>10. b) Administrative issues: Announcements</td>
<td>T: <em>And for those of you who are interested in going, joining the German club to the pub crawl. They are having a bake sale today and if you want your T-shirts, you can go there and maybe can join the party.</em></td>
</tr>
<tr>
<td>- Teacher B</td>
<td></td>
</tr>
<tr>
<td>Functional Category</td>
<td>Example from L1 Data</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>11. Repetition of student L1 utterance</td>
<td>T: Und das ist jetzt, was ist ein Mahnmal [And that is now, what is a Mahnmal]? S: Monument. T: Monument, ja.</td>
</tr>
<tr>
<td>- Teacher A</td>
<td></td>
</tr>
<tr>
<td>12. Reaction to student question</td>
<td>S: Was heisst Kanake [What does Kanake mean]? T: Es meint alle ausländischen Arbeiter [it denotes all foreign workers]. Also Türken, Italiener, Griechen [So, Turks, Italians, Greeks]. Kanake, just because someone asked twice already. It is a swear word for foreign workers.</td>
</tr>
<tr>
<td>- Teacher A</td>
<td></td>
</tr>
<tr>
<td>13. Humour</td>
<td>T: Wer von den Männern ist denn überhaupt positiv [Is any of the men positive]? Female S1: Richard Simmons. T: Warum [Why]? S1: Er hat Fitness und Gesundheit und es ist so glücklich, immer glücklich [He has fitness and health, it is so happy, always happy]. T: Findet ihr auch, dass der Simmons das positivste von diesen Bildern ist [Do you find too that Simmons is the most positive of the images]? I am not going to tell anybody what you said in class. (student laughter)</td>
</tr>
<tr>
<td>- Teacher A</td>
<td></td>
</tr>
<tr>
<td>14. a) Teacher as bilingual:</td>
<td>T: Okay, what is the, was ist der eigentliche englische begriff [What is the actual term in English]?</td>
</tr>
<tr>
<td>Arbitrary codemixing</td>
<td></td>
</tr>
<tr>
<td>- Teacher B</td>
<td></td>
</tr>
<tr>
<td>14. b) Teacher as bilingual:</td>
<td>T: Der Film ist nur so zehn Minuten lang [The movie is only ten minutes long]. Er hat einen Oscar gewonnen für den besten short film [It has won an Oscar for best short film].</td>
</tr>
<tr>
<td>L1 words from L1 culture</td>
<td></td>
</tr>
<tr>
<td>- Teacher A</td>
<td></td>
</tr>
</tbody>
</table>

*Note. For better readability, the transcription conventions that were demanded by the computer program have been removed from the examples. Translations are provided in square brackets following the German. Round brackets provide further contextual information. Relevant examples are in italics. Many L1 episodes contain more than one L1 utterance. T identifies teacher and S a student. A number is added to a student if the student has more than one turn.*
The third step in determining the functional categories of L1 utterances was the coding of the data. During this process, the L1 utterances were coded based on the context in which they occurred. L1 utterances were first examined based on whether they were a translation. Then, they were coded for any other category that was applicable, except for the categories of *Repetition of student L1 utterance, Humour, and Teacher as bilingual*, which were always directly said in L1.

After the coding of the data, the frequency of L1 purposes was determined by quantifying the L1 utterances that were grouped under the various functional categories. As this study did not distinguish between the amount of words contained in an L1 utterance, it was unproblematic to quantify the number of L1 utterances. Thus, the number and percentage of L1 utterances were calculated for each functional category to gain an understanding of the purposes for which the teachers had used L1.

16 weeks after the first coding of L1 utterances, a second coding took place in which all L1 utterances were coded again. 25% of L1 utterances of the first and second coding were compared to establish intra-rater reliability. As the total number of utterances was 459, every fourth utterance of the second coding was compared with the first, i.e., 114 utterances were randomly checked. Out of the 114 utterances, five were incongruent with the first coding, which yields a .95 level of agreement.
3.5.3 Determining the Teachers' Perceptions of their L1 Use

Interviews and stimulated recall sessions were used to collect data on the beliefs of the two teachers concerning the role of L1 in language teaching and their perceptions of L1 use in their own classroom practice. Following Basturkmen, Loewen, and Ellis (2004), in this study, beliefs are defined as "statements teachers made about their ideas, thoughts, and knowledge that are expressed as evaluations of what 'should be done', 'should be the case', and 'is preferable'" (p. 244). In the analysis of the teachers' thoughts from the interviews, thematic points were extracted from the data. Thematic points constituted statements concerning an aspect of L1 use. Based on sharing common themes, the thematic points were grouped under the four categories of Factors influencing teachers' L1 use, Purposes of L1 use, Amount of L1 use, and Awareness of L1 use. The first category comprised factors such as students' proficiency level that the teachers viewed as affecting their L1 use in class. The category of Purposes of L1 use contained thematic points that described purposes of L1 use. Amount of L1 use encompassed the teachers' estimation of how much L1 they used in class. The category of Awareness of L1 use consisted of thematic points providing information about the teachers' thoughts concerning their L1 use.

Subsequently, the teachers' comments regarding the amount and the purposes of L1 use gathered in the interviews were compared with the classroom data. This was done to gain an understanding of the relationship between the teachers' perceptions of their L1 use and their classroom practice.

The inquiry into the teachers' perceptions of L1 use was further supplemented by conducting stimulated recall sessions with the teachers. In the sessions, the teachers
watched 20 L1 episodes from their teaching and commented on why they used L1 during those moments in class. In the analysis, common thematic points were extracted from the stimulated recall data. As many of the thematic points were similar to those of the interviews, they were organized into the same four categories adopted for the interview data.
4. 1 Amount of L1 in German Classes

The first research question addressed as to what extent the teachers used L1 in their classes. To answer this question, a word count of all L1 and L2 words was carried out. As all English words were tagged with a symbol in the transcription process, the computer program was able to distinguish L1 from L2 words. After the count of the total number of transcribed words and of L1 words only, L1 words were subtracted from the total number of words to gain the number of L2 words. Results were then computed in terms of percentages to compare the ratio of L1 and L2 word use between teachers.

The word count yielded a total of 2,828 L1 words and 22,198 L2 words, equivalent to an overall use of 11.3 % L1 words and 88.6 % L2 words, respectively. Table 2 shows the teachers’ average and individual use of L1 and L2 words across the recorded classes. Teacher A used fewer L1 words with an average amount of 9.3 % while Teacher B used an average of 13.2 % L1 words, shown in row 1. However, a Chi-square test comparing the L1 averages of the two teachers revealed no significant difference.
<table>
<thead>
<tr>
<th>German classes</th>
<th>Teacher A</th>
<th></th>
<th>Teacher B</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>L1</td>
<td></td>
<td>L2</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Total of words</td>
<td>1157</td>
<td>9.3</td>
<td>12389</td>
<td>90.7</td>
</tr>
<tr>
<td>Class 1</td>
<td>494</td>
<td>13.7</td>
<td>3088</td>
<td>86.3</td>
</tr>
<tr>
<td>Class 2</td>
<td>270</td>
<td>7.8</td>
<td>3169</td>
<td>92.2</td>
</tr>
<tr>
<td>Class 3</td>
<td>214</td>
<td>13.8</td>
<td>1326</td>
<td>86.2</td>
</tr>
<tr>
<td>Class 4</td>
<td>179</td>
<td>4.6</td>
<td>3649</td>
<td>95.4</td>
</tr>
</tbody>
</table>

4.1.1 Comparison of L1 Amount within and between Teachers

When considering the use of L1 across individual classes for each teacher, a considerable range became apparent (see Figure 1). Chi-square tests comparing L1 amounts in the teacher’s individual classes revealed significant differences between some of the classes (see Table 3). For example, there were significant differences between Teacher A’s amount of 4.6% L1 in class 4 and the amounts of 13.7% and 13.8% in class 1 and 3, respectively. Similarly, there were significant differences between Teacher B’s amounts of 7.7% L1 and 10.3% in class 4 and 1, respectively, and the amount of 25.1% L1 occurring in class 2. These findings suggest that L1 use fluctuates depending on the lesson.
Figure 1. L1 Use across German Teachers’ Classes

Table 3

<table>
<thead>
<tr>
<th>Teacher A</th>
<th>Teacher B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Comparison of German classes</strong></td>
<td><strong>Significance</strong></td>
</tr>
<tr>
<td>Class 1</td>
<td>Class 2</td>
</tr>
<tr>
<td>(13.7 %)</td>
<td>(7.8 %)</td>
</tr>
<tr>
<td>Class 1</td>
<td>Class 3</td>
</tr>
<tr>
<td>(13.7 %)</td>
<td>(13.8 %)</td>
</tr>
<tr>
<td>Class 1</td>
<td>Class 4</td>
</tr>
<tr>
<td>(13.7 %)</td>
<td>(4.6 %)</td>
</tr>
<tr>
<td>Class 2</td>
<td>Class 3</td>
</tr>
<tr>
<td>(7.8 %)</td>
<td>(13.8 %)</td>
</tr>
<tr>
<td>Class 2</td>
<td>Class 4</td>
</tr>
<tr>
<td>(7.8 %)</td>
<td>(4.6 %)</td>
</tr>
<tr>
<td>Class 3</td>
<td>Class 4</td>
</tr>
<tr>
<td>(13.8 %)</td>
<td>(4.6 %)</td>
</tr>
</tbody>
</table>
It is important to note that the elevated amount of L1 use in Teacher B’s second class was found to be due to making extensive announcements at the beginning of class (note that no recordings had been made of the first 30 minutes of Teacher A’s classes). Therefore, further analysis was conducted in which the L1 data concerning the announcement at the beginning of Teacher B’s second class were removed. When this was done, the L1 use average was found to be similar to the amount of L1 in the rest of the classes (see Figure 2).

![Graph showing L1 Use across German Teachers’ Classes (without Announcement at Beginning of Class 2)](image)

*Figure 2. L1 Use across German Teachers’ Classes (without Announcement at Beginning of Class 2)*
4. 2 Purposes of L1 Use

The second research question concerned the purposes for which the teachers employed L1. Before coding the L1 data according to purpose, all L1 data were divided into units called L1 utterances (for a description of the procedure see section 3.5. 2).

The distribution of L1 utterances was calculated based on the 200 minutes of classroom time each teacher was recorded. Table 4 shows the frequency (F) of L1 utterances and equivalent percentages. It illustrates that Teacher A used slightly fewer L1 utterances with 49.4 % during 200 minutes of classroom time than Teacher B, who used 50.6 % of all L1 utterances during the same amount of time.

<table>
<thead>
<tr>
<th>L1 utterances</th>
<th>Total number /400 minutes</th>
<th>Teacher A /200 minutes</th>
<th>Teacher B /200 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>L1 utterances</td>
<td>459</td>
<td>100</td>
<td>227</td>
</tr>
</tbody>
</table>

All L1 utterances were coded according to purpose and grouped into a functional category of L1 use (see page 41 for the coding scheme). After the completion of the coding process, a calculation of L1 utterances in the functional categories was carried out to understand how much the teachers had used L1 for the different purposes. Table 5 illustrates the distribution of L1 purposes.
It is important to note that sometimes an L1 utterance, which was a translation, served two purposes. For example, in some cases an L1 translation was used simply to translate an L2 articulation for the sake of clarifying lesson content. In other cases, an L1 utterance was used to translate an L2 articulation as well as to serve another L1 purpose (the translations that played two roles were called function-based translations). Therefore, the number of purposes (Table 5 and Table 6) was greater than the number of actual L1 utterances. Table 5 illustrates that the most common purposes for which L1 was used were translation, activity instruction, personal comments, and teacher as bilingual.
Table 5
* Purposes of L1 Utterances *

<table>
<thead>
<tr>
<th>Functional categories</th>
<th>Teacher total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
</tr>
<tr>
<td>Translation</td>
<td>170</td>
</tr>
<tr>
<td>L1-L2 contrast</td>
<td>19</td>
</tr>
<tr>
<td>Evaluation</td>
<td>9</td>
</tr>
<tr>
<td>Activity instruction</td>
<td>67</td>
</tr>
<tr>
<td>Activity objective</td>
<td>2</td>
</tr>
<tr>
<td>Elicitation of student contribution</td>
<td>37</td>
</tr>
<tr>
<td>Personal comment</td>
<td>62</td>
</tr>
<tr>
<td>Comprehension check</td>
<td>13</td>
</tr>
<tr>
<td>Classroom equipment</td>
<td>1</td>
</tr>
<tr>
<td>Administrative issues</td>
<td>38</td>
</tr>
<tr>
<td>Repetition of student L1 utterance</td>
<td>18</td>
</tr>
<tr>
<td>Reaction to student question</td>
<td>26</td>
</tr>
<tr>
<td>Humour</td>
<td>12</td>
</tr>
<tr>
<td>Teacher as bilingual</td>
<td>52</td>
</tr>
<tr>
<td>Total</td>
<td>526</td>
</tr>
</tbody>
</table>
4.2.1 Comparison of L1 Purposes between Teachers

After the frequency and equivalent percentages of L1 utterances in the functional categories were calculated, a Chi-square test was carried out to determine whether significant differences existed between the teachers concerning the purposes for which they used L1. Table 6 shows an overview of the main functional categories of L1 use of the teachers and the level of significance between the instructors if applicable. Three main categories contained further subcategories, presented in Table 7.

Table 6 shows that significant differences were found between the teachers in the use of L1 for translation, administrative issues, personal comment, and teacher as bilingual. The fact that L1 was frequently used by the teachers to provide translations and activity instructions suggests that both instructors employed L1 mainly to make L2 accessible for the students, i.e., translations and activity instructions in L1 were intended to help students understand what was taking place in class and what was expected of them. To a lesser degree, the teachers also used L1 to elicit student contribution, suggesting that this may be a strategy to catch students’ attention and to motivate them to participate in class.

When considering the distribution of the overall use of translations between the two teachers, Teacher B used L1 for this purpose significantly more than Teacher A. Table 6 illustrates that Teacher B used 41.8% of L1 utterances for the purpose of translations, while Teacher A used 21.6% of his L1 use for the same purpose. This shows that Teacher B resorted more often to translation as a strategy to ensure student comprehension than Teacher A.
Table 6
Purposes of L1 Utterances: Teacher A and Teacher B

<table>
<thead>
<tr>
<th>Functional categories</th>
<th>Teacher A total</th>
<th>Teacher B total</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>Translation</td>
<td>53</td>
<td>21.6</td>
<td>117</td>
</tr>
<tr>
<td>L1-L2 contrast</td>
<td>12</td>
<td>4.9</td>
<td>7</td>
</tr>
<tr>
<td>Evaluation</td>
<td>3</td>
<td>1.2</td>
<td>6</td>
</tr>
<tr>
<td>Activity instruction</td>
<td>37</td>
<td>15.0</td>
<td>30</td>
</tr>
<tr>
<td>Activity objective</td>
<td>1</td>
<td>0.4</td>
<td>1</td>
</tr>
<tr>
<td>Elicitation of student contribution</td>
<td>18</td>
<td>7.3</td>
<td>19</td>
</tr>
<tr>
<td>Personal comment</td>
<td>49</td>
<td>19.9</td>
<td>13</td>
</tr>
<tr>
<td>Comprehension check</td>
<td>5</td>
<td>2.1</td>
<td>8</td>
</tr>
<tr>
<td>Classroom equipment</td>
<td>--</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td>Administrative issues</td>
<td>3</td>
<td>1.2</td>
<td>35</td>
</tr>
<tr>
<td>Repetition of student L1 utterance</td>
<td>9</td>
<td>3.7</td>
<td>9</td>
</tr>
<tr>
<td>Reaction to student question</td>
<td>6</td>
<td>2.4</td>
<td>20</td>
</tr>
<tr>
<td>Humour</td>
<td>12</td>
<td>4.9</td>
<td>--</td>
</tr>
<tr>
<td>Teacher as bilingual</td>
<td>38</td>
<td>15.4</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>246</td>
<td>100</td>
<td>280</td>
</tr>
</tbody>
</table>

Note. Double dashes indicate no occurrence of the respective function and inapplicability of significance.
Table 7  
Subcategories of Functional Categories

<table>
<thead>
<tr>
<th>Functional categories</th>
<th>Total number</th>
<th></th>
<th>Teacher A</th>
<th></th>
<th>Teacher B</th>
<th></th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Translation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content-based</td>
<td>104</td>
<td>19.8</td>
<td>34</td>
<td>13.8</td>
<td>70</td>
<td>25.0</td>
<td>$p = .075$</td>
</tr>
<tr>
<td>Function-based</td>
<td>66</td>
<td>12.5</td>
<td>19</td>
<td>7.7</td>
<td>47</td>
<td>16.8</td>
<td>$p = .072$</td>
</tr>
<tr>
<td>Administrative issues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test/exams</td>
<td>8</td>
<td>1.5</td>
<td>3</td>
<td>1.2</td>
<td>5</td>
<td>1.8</td>
<td>$p = .564$</td>
</tr>
<tr>
<td>Announcements</td>
<td>30</td>
<td>5.7</td>
<td>--</td>
<td>--</td>
<td>30</td>
<td>10.7</td>
<td>--</td>
</tr>
<tr>
<td>Teacher as bilingual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arbitrary codemixing</td>
<td>24</td>
<td>4.7</td>
<td>17</td>
<td>6.9</td>
<td>7</td>
<td>2.5</td>
<td>$p = .206$</td>
</tr>
<tr>
<td>L1 words from L1 culture</td>
<td>28</td>
<td>5.3</td>
<td>21</td>
<td>8.5</td>
<td>7</td>
<td>2.5</td>
<td>$p = .083$</td>
</tr>
</tbody>
</table>

*Note.* Double dashes indicate no occurrence of the respective function and inapplicability of significance.

As was described in the methodology section, during the coding process, each L1 utterance was coded according to whether it was a translation of a previous L2 utterance into L1. If an L1 utterance was a translation, it was considered whether its content fell under a purpose captured by the coding scheme. For example, if an L1 utterance was a translation of an activity instruction, the utterance was coded both as a translation (which was called a function-based translation) and as an activity instruction. However, if the L1 utterance was a translation that pertained to the content of the lesson, the utterance was coded as being a content-based translation only.
A comparison between the teachers’ use of L1 regarding the subcategories of *Translation* revealed interesting similarities. The teachers displayed a similar proportion of content-based translations and function-based translations as shown in Figure 3. Although Teacher B resorted more regularly to translating than Teacher A, both teachers used the majority of their translations for content-based translations. This suggests that in spite of the teachers’ different teaching experience, both preferred to employ translations to make instructional content intelligible instead of translating matter connected to the management of the class.

*Figure 3. Content-based Translations and Function-based Translations*
Table 8 provides an overview of the translations that served other classroom purposes. Results show that both teachers most commonly used translations to provide activity instructions, to elicit student contribution, and to react to a student question. A comparison of the functional categories that were used for general L1 use (see Table 6 and Table 7) with the categories that were most often translated (see Table 8) revealed an interesting parallel. Both teachers most often either used L1 directly or used first L2 and then translated into L1 to express notions falling under the categories of *Elicitation of student contribution* and *Activity instruction*. These findings further suggest that the teachers were concerned with ensuring a smooth transmission of class tasks and assignments and with encouraging students to participate in class.

While the teachers showed similarities in their use of translations, results also showed differences between Teacher A and Teacher B. Most significantly, the teachers differed in the amount they translated for the purpose of contrasting L1 and L2 forms. Teacher A used 26.3 % of function-based translations for this purpose, whereas Teacher B used only 4.2 % of translations for contrasting L1 and L2 forms. The use of L1 for this purpose suggests that although the classes had a conversational emphasis, Teacher A’s teaching experience may have led him to make more habitual contrasts between L1 and L2 to facilitate learning than Teacher B.

The teachers also differed significantly in their use of translations for the purpose of reacting to a student’s question. Teacher A translated 15.7 % of his reactions to student questions, whereas Teacher B translated 39.6 %. This suggests that although Teacher B attempted to counter student questions in L2, she resorted to L1 as a more reliable means to answer student questions.
The teachers also differed significantly with respect to translations for the purpose of checking student comprehension. Teacher A used 10.5% of translations for this purpose, while Teacher B did so with only 2.1%. This suggests that Teacher A may have considered L1 use as more appropriate means to ensure that students were understanding what was taking place in class and to encourage student feedback.

Table 8
* Purposes of Function-based Translations *

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Total number</th>
<th>Teacher A</th>
<th>Teacher B</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>Function-based translation</td>
<td>67</td>
<td>100</td>
<td>19</td>
<td>100</td>
</tr>
<tr>
<td>L1-L2 contrast</td>
<td>7</td>
<td>10.4</td>
<td>5</td>
<td>26.3</td>
</tr>
<tr>
<td>Evaluation</td>
<td>1</td>
<td>1.5</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Activity instruction</td>
<td>14</td>
<td>20.9</td>
<td>4</td>
<td>21.0</td>
</tr>
<tr>
<td>Elicitation of student contribution</td>
<td>17</td>
<td>25.4</td>
<td>5</td>
<td>26.3</td>
</tr>
<tr>
<td>Personal comment</td>
<td>2</td>
<td>3.0</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Comprehension check</td>
<td>3</td>
<td>4.5</td>
<td>2</td>
<td>10.5</td>
</tr>
<tr>
<td>Administrative issues</td>
<td>1</td>
<td>1.5</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Reaction to student question</td>
<td>22</td>
<td>32.8</td>
<td>3</td>
<td>15.7</td>
</tr>
</tbody>
</table>

*Note.* Double dashes indicate no translation of the respective function and inapplicability of significance.
A significant difference between teachers also emerged from the comparison of their L1 use for the purpose of personal comment, a general category of L1 use independent of translations. This purpose of L1 use was the second most used purpose, for which Teacher A's used 19.9% L1. This is contrasted with Teacher B, who only used 4.6% L1 for the same purpose. This finding suggests that Teacher A not only used L1 for purely pedagogical purposes such as translating, giving activity instructions, and providing L1-L2 contrasts, but he also employed L1 to contribute a personal note to the classroom by adding his thoughts to current classroom events. Further evidence of this may be seen in Teacher A's use of L1 for the purpose of humour for which he used 4.9% L1. No examples of L1 use for humour were found in Teacher B's classroom data. Using L1 for such sociable purposes may be a strategy to build rapport with the students and to encourage them in the process of language learning.

A further significant difference in the teachers' use of L1 was found concerning the purpose of administrative issues. Teacher B used L1 considerably more often (12.5%) than Teacher A (1.2%). It should be noted that the significant difference between the teachers for this purpose may be partly due to the different times during which the teachers' classes were recorded. Teacher B's classes were recorded from beginning to end and included all announcements. However, Teacher A's classes were only partially recorded (for a detailed description of the recording procedure, refer to section 3.4. 1) and thus did not include the beginning of the lessons where announcements are often made. It was observed that Teacher A made some announcements in L2 during his recorded classes regarding student marks, change of lesson plan as well as addressing the final exam. This suggests that Teacher B relied more
on L1 to ensure the comprehension of announcements than Teacher A. However, with respect to the dissimilar sampling of the teachers' classes, their different use of L1 for administrative purposes will be disregarded in the remainder of the thesis.

Finally, a significant difference also existed between Teacher A and Teacher B concerning the use of L1 for the purpose of teacher as bilingual. Teacher A used 15.4% of L1 utterances for this purpose whereas Teacher B employed only 5.0%. The difference in distribution of L1 for this purpose may be due to the fact that Teacher A has lived in Canada for 20 years while Teacher B had only been in an English-speaking environment for eight months at the time the study was carried out. It is reasonable to assume that because of this difference, L1 was more entrenched in Teacher A's mind than in Teacher B's.

The category of Teacher as bilingual featured the two subcategories of Arbitrary codemixing and L1 words from L1 culture. The former category captured false starts etc. and the latter the incorporation of L1 words such as midterm into L2 discourse. Although the teachers differed with respect to the amount of L1 that fell under the category of Teacher as bilingual, both showed a similar proportion of L1 use between the two subcategories. Teacher A used slightly more L1 utterances for the purpose of L1 words from L1 culture than for arbitrary codemixing, while Teacher B used an equal amount for both subcategories. This finding suggests that the shortness of Teacher B's exposure to the bilingual context had a smaller impact on the amount of L1 she used for the purpose of teacher as bilingual. Nevertheless, the bilingual context had a similar effect to such a degree that Teacher B engaged L1 for the purposes of L1 words from L1 culture and
arbitrary codemixing with a proportion that resembled the one found in Teacher A's L1 use.

The findings show that despite similar use of L1 to help students understand what goes on in class, the teachers differed with respect to how much they relied on L1 to help students understand L2. Teacher B's frequent use of L1 to translate suggests that this may be an area that reflects Teacher B's inexperience. However, the fact that both the experienced and inexperienced teacher relied on L1 to translate, to provide activity instructions, and to elicit student contribution suggests that L1 use is not an occasional incident but an integral part of a foreign language classroom.

4.3 Interview and Stimulated Recall Results

4.3.1 Interview Data: Teacher A and Teacher B

After the completion of the classroom recordings, the teachers were invited to participate individually in an interview. The interviews were semi-structured, i.e., they were guided by prepared questions (see appendix A). The interviews were conducted to understand the factors that the teacher believed affected L1 use in their teaching practice. The interviews lasted approximately an hour, in which the teachers talked about their thoughts concerning L1 use in language teaching. They were explicitly asked to estimate the amount of time they spent using L1 in class and for what purposes they used it. The information concerning amount and purposes of L1 use was elicited in order to compare the teachers' perceptions of L1 use with their actual teaching practice. The interviews were carried out in German, audio recorded and transcribed.
In the analysis of the interview data, the unit of analysis was a thematic point, which was an aspect of L1 use that the teachers mentioned during the interview. After all thematic points were identified according to their theme, the points were grouped in terms of sharing common themes. This gave rise to four broad categories: a) *Factors influencing teachers’ L1 use*, b) *Purpose of L1 use*, c) *Amount of L1 use*, and d) *Awareness of L1 use*. All thematic points describing the factors that affected the teachers’ use of L1 (e.g., students’ low proficiency level) were grouped under *Factors influencing teachers’ L1 use*. All thematic points referring to purposes of L1 use (e.g., motivating students) were grouped under *Purposes of L1 use*. The teachers expressed their estimation of the amount of L1 they used in class as one thematic point, categorized under *Amount of L1 use*. Finally, all thematic points relating to the teachers’ opinions of their own L1 use and language behaviour were subsumed under *Awareness of L1 use*. Table 9 presents the thematic points grouped according to category.
<table>
<thead>
<tr>
<th>Thematic points Teacher A</th>
<th>Thematic categories</th>
<th>Thematic points Teacher B</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Foreign language context</td>
<td>1. Factors influencing teachers’ L1 use</td>
<td>- Foreign language context</td>
</tr>
<tr>
<td>- Students’ low level</td>
<td></td>
<td>- Students’ low level and circumlocution</td>
</tr>
<tr>
<td>- Set-up of German classes at the university</td>
<td></td>
<td>- Set-up of German classes at the university</td>
</tr>
<tr>
<td>- Students’ reason for learning German</td>
<td></td>
<td>- Time set-up of Teacher B’s course section</td>
</tr>
<tr>
<td>- Variability of individual classes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Credo concerning L1 use</td>
<td></td>
<td>- Desirability of L1 use</td>
</tr>
<tr>
<td>- Desirability of L1 use</td>
<td></td>
<td>- Personal language learning experience</td>
</tr>
<tr>
<td>- L1 as brainstorming tool</td>
<td>2. Purposes of L1 use</td>
<td>- L1 as brainstorming tool</td>
</tr>
<tr>
<td>- Comprehension check</td>
<td></td>
<td>- Comprehension check and saving time</td>
</tr>
<tr>
<td>- Student motivation</td>
<td></td>
<td>- Student motivation</td>
</tr>
<tr>
<td>- In-class purposes of L1 use: announcing tests, explaining vocabulary, giving activity instructions, summaries</td>
<td></td>
<td>- In-class purposes of L1 use: explaining vocabulary, announcing exams, administrative issues</td>
</tr>
<tr>
<td>- Not more than 10 %</td>
<td>3. Amount of L1 use</td>
<td>- Between 10 % and 20 %</td>
</tr>
<tr>
<td>- Ability to discern between L1 and L2</td>
<td>4. Awareness of L1 use</td>
<td>- Habit of using L1</td>
</tr>
</tbody>
</table>
In the presentation of the teachers’ interview data, the teachers’ translated quotations are occasionally interspersed with German phrases when it was felt that the original German wording expressed the teacher’s point best. Translations are given in square brackets, clarifying additions are given in round brackets.

1. Factors influencing teachers’ L1 use

The interview category of *Factors influencing teachers’ L1 use* contained nine thematic points. They pertained to the foreign language context, the students’ low proficiency level, the set-up of the German classes at the university, the time set-up of Teacher B’s classes, the students’ reasons for learning German, the variability of individual classes, the credo concerning L1 use, the desirability of L1 use, and personal language learning experience.

- Foreign language context

Teacher A established early in the interview the distinction between second and foreign language context. He stated that he used L1 because we are in a foreign language environment and we all share the same language, English, except maybe for a few international students. This is unlike Germany where you have students from all kinds of language backgrounds where you can only use German.

Teacher B also mentioned the distinction between second and foreign language context as she discussed her experience teaching at the University of Victoria. She said:

Of course, students learning German here in Canada have it much more difficult than those learning it in Germany. In such a context (second language context) I can understand that you would use even more L2 because already on the street,
everywhere around them they're exposed to the language. That means they're at least already used to the sound of the language. Here, students have no idea, nowhere but in the classroom do they hear the L2. So in this case it's a bit more difficult and it takes longer until you get to a point where you say, we only speak the L2 a 100%. You can't do this at the beginning level here (in a foreign language context).

- Students' low proficiency level

Teacher A mentioned the low language proficiency level of the students. He said:

Because of the low level of the students, I use it (L1). ... Otherwise, enrollment numbers drop... In this course the students are only in their second year where they were totally immersed in grammar in their first year and where it was almost all in English. Now it's their first time in a course with an oral emphasis and immersing them in German just doesn't work. It's just too strange for them. Maybe if this was done from the beginning it would be a different thing but like this...

Teacher B also made reference to the proficiency level of the students and expressed doubt about the usefulness of circumlocution:

Level is definitely a factor in determining how much L1 you use. ... This is different when you're advanced, say in the 300 level where you already have a good understanding of the language where I know 70% of what I said has been understood. But I can't do that in the beginner class. I can't even think of as many easy words and synonyms as it would take and it takes hours to do. And if I give them five synonyms that I know, they may still be unclear about it.

- Set-up of German classes at the university

Teacher A remarked that the general set-up and organization of German courses at the university were a hurdle for classes to take place entirely in L2. He noted:

In first year, students are immersed in grammar and classes are conducted almost exclusively in English in order to get through the syllabus. The problem is that there is no time left for talking because the material to be learned is based on textbooks from the States. There they have a slightly different system where they
have a few weeks more to go through the material. But we don’t so we spend the whole time trying to get through the material.

Thus, with view to this time pressure, L1 use was inevitable because

this is a university environment where students are expected to go from zero to reading Goethe after four years? Of course that doesn’t happen, especially not to those (students) that don’t go abroad to Germany for a year or even just a summer.

Teacher B also talked about the structure of the German courses at the university.

Using L2 surely would be a better way to do it but the way the courses are structured here, they simply don’t leave enough room and time. Because all the previous grammar courses... (they are) in no way as communicative as it is always claimed.... The problem is that the courses are too tightly structured, too much material that the students have to learn in too short a time.... You can tell because the finals are always worse than the individual tests of the students.

- Time set-up of Teacher B’s course section

Teacher B also stated that the way her section of the course had been divided into three one-hour classes per week had made it more difficult for L2 to be the main language in class. “For this course, it makes definitely more sense to have two 1.5 hour lessons because it takes time to get into the language and our lesson was over when people started to get into it.”

- Students’ reason for learning German

Teacher A described a further reason that necessitated the use of L1.

The problem with this whole set-up is that the majority of students only do one or two of these courses to get their foreign language credit. But those who work toward a major in the language and want to read literature in the third year, ... they have to learn a lot.
- Variability of individual classes

Teacher A noted that there were many factors that influenced the use of L1. He said:

It depends on so many things, classes are different. How many people are in the class, what is their level, what activity (are they doing), how big are the groups in which they work, how well do they get along.

- Credo concerning L1 use

Teacher A's credo concerning the use of L1 emerged early during the interview. As he discussed the role of L1 in language teaching, he said: "I use it to explain grammar but in this conversation course I try not to use it too much. It is "soviel deutsch wie möglich, soviel englisch wie nötig" [as much German as possible, as much English as necessary]."

- Desirability of L1 use

As Teacher A reflected on the use of L1 in language teaching, he described a conundrum. He stated:

One point is too that after all, this is a university and we do strive for a certain level of intellectual stimulation and "kein Kasperle Theater" [no puppet show]. If we were to conduct the entire class in German, many topics would be impossible to do because the students' level is so low. So on the one hand students should improve their language ability. But wouldn't it be great if they could take something else away besides the weather and the origins of the Pretzel? I think we could impart the same language abilities with more interesting subject matters with a bit of help from English. Or else, would the materials truly reflect the intellectual level of the students, just so we can conduct the class in the target language?

Teacher B expressed clear views on when the use of L1 was advantageous:

I do think the L2 should be used as much as possible, with the exception of explaining grammar. ...So I think it's important to find a language that they all
speak in a heterogeneous group to make sure they understand....An advantage here is to be teaching a homogeneous group of students, they’re all native speakers of English except the few Asian students.

- Personal language learning experience

Teacher B made reference to her own language learning experience repeatedly in support of her views. She mentioned the benefits of being immersed in L2 and how crosslinguistic comparisons had aided her in her own language learning experience.

This is how I learned it in school and ... what I liked in my language courses (was) that from the start you were spoken to in the target language... I think it is helpful to build on those concepts already present in your mother tongue. I felt that when I was studying Russian were they have six cases. German only has four but same concept.

2. Purposes of L1 use

The interview category of Purposes of L1 use comprised four thematic points of L1 as a brainstorming tool, L1 to encounter student incomprehension, for in-class purposes (these purposes were explicitly elicited from the teachers), and L1 for crosslinguistic comparison.

- L1 as a brainstorming tool

Teacher A expressed that L1 had the role of an idea-generating tool because “in this course, students have a very limited knowledge of German. They want to participate but they just don’t have the ability. So they often express their ideas in English and we
continue from there in German.” As this course offered the first opportunity for students to apply and practice what they had learned in the grammar-focused courses, they still faced a challenge to express themselves. This was particularly the case for students who had not been to Germany. Teacher B said:

On this level, you think they know so much but really they lack a lot of vocabulary because all they’ve been doing is grammar. Therefore for me it’s important that they participate, that they express their opinion and if that’s not possible in German, then they can do it in English. So I told them it’s okay to start in English and I would then put the important concepts and vocabulary that they used on the board in German. It encourages them to have said at least something during the class.

- Comprehension check and saving time

Teacher A described that he made L1 use to ensure student comprehension.

I watch students’ faces and you can tell whether they understand. If I try to use circumlocution and they still don’t get it, I use English. Otherwise, maybe one gets it or looks in the dictionary and whispers it to the others.

Teacher B similarly remarked:

I sometimes tried to explain it (vocabulary) in German, to find synonyms but if there were still big eyes looking at me, I gave them the English word. But it also saves time. I give them the English word and they know immediately what it means... So in this course when we reached comprehension limits I gave it to them in English. Or when I wanted to make sure that they understood because it was important for them to understand and I didn’t want a hundred questions afterwards.

- Student motivation

When considering the use of L1 in language teaching, Teacher A implicitly referred to L1 as a tool that had a positive affective impact on the students. Teacher A said, “[L1] helps
them keep on track to what’s going on in class and keeps them from losing interest and motivation.” When Teacher B reflected on the use of L1 in class, she also mentioned the affective aspect of student language learning. She noted: “It encourages them [students] to participate because there’s a big barrier, many are simply scared to say something because they feel they’re not as good as those who have been to Germany.”

- In-class purposes of L1 use

When asked explicitly to consider the purposes for which he used L1 in class, Teacher A identified four purposes of L1 use excluding grammar:

Especially when it’s important that they understand, so for example for tests and exams. Also for vocabulary, when they don’t or I think they don’t understand. I also use it to explain grammar usually, in other courses. Also, to give directions for activities and summaries.

Teacher B described three purposes of L1 use excluding grammar. She said:

English is the language with which I can communicate. For example for grammar instruction I can be sure they understand the words I use... I used it (L1) when it came to vocabulary, exams, administrative things, were you know that there are always a lot of questions by the students.

- L1 for crosslinguistic comparison

Teacher B considered the role of L1 as a pedagogical tool for students to learn about the similarities and dissimilarities of L1 and L2. Teacher B stated:

I believe the mother tongue is always the matrix based on which you learn. ... There is the philosophy not to make comparisons to the mother tongue because they (students) should be forced to think themselves into the new language. But of course that doesn’t mean that as a student I do that because of course I depart
from a certain basis that is my mother tongue. And then I can see that (a language structure) exists and that doesn’t exist.

3. Amount of L1 use

The interview category of amount of L1 contained one thematic point in which the teachers estimated the amount of L1 they used in class. Teacher A said: “I don’t think I use more than 10% of English in my class.” When asked to estimate the amount of L1 she used, Teacher B noted: “On a scale from 1 to 10, I think not more than 2. So between 10% and 20%.”

4. Awareness of L1 use

The interview category of Awareness of L1 use contained two thematic points of the ability to discern between L1 and L2 and L1 use being a habit.

- Ability to discern between L1 and L2

Teacher A made a statement concerning his language awareness:

In this course, I try not to use it (L1) too much. It is quite possible that sometimes I am not aware of which language I use, I have lived here for so long. But usually I try to stay in German, even if students have just said something in English. I think I can do it pretty well, but who knows!
- Habit of using L1

Teacher B recounted her experience with using German in the grammar-centred courses and its relation to using German in the conversation course.

Now in this course I know I have to do it but in the grammar courses it's difficult for me to speak German all the time. I speak way too much English but the problem is that I have to teach so much grammar. I hope I did a better job in this course, that I managed to speak more German, except of course they look at me as if I'm talking Chinese to them... Sometimes it happens, because I was so used to using English in the first semester in the grammar course that I slip into it and then I stop myself thinking. I can say this in German, too. It's automatic, I live here and try to speak as much English as possible. But I guess more than that it's being used to English as the instructional language from the other courses.

4.3.2 Comparison of Teacher Perceptions with Classroom Data

In order to gain an understanding of the relationship between the teachers' perceptions of L1 use and their actual classroom practice, their estimations about amount and purposes of L1 use from the interviews were compared with their recorded classes. Only the purposes that the teachers explicitly mentioned in response to the interview question were used for comparison. This approach was chosen because the explicitly mentioned amount of L1 and purposes of L1 use were tangible elements that could be compared with the limited amount of classroom data. Table 10 shows a comparison between the teachers' estimation of amount and purposes of L1 use and evidence thereof in their classroom practice.
Table 10
Comparison of Teachers’ Perceptions and Classroom Practice

<table>
<thead>
<tr>
<th>Teachers’ perceptions</th>
<th>Teachers’ classroom practice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher A</strong></td>
<td></td>
</tr>
<tr>
<td>Amount of L1:</td>
<td></td>
</tr>
<tr>
<td>Not more than 10 %</td>
<td>9.3 % L1 average</td>
</tr>
<tr>
<td>Purposes of L1:</td>
<td></td>
</tr>
<tr>
<td>Exams announcements</td>
<td>✓</td>
</tr>
<tr>
<td>Clarifying vocabulary</td>
<td>✓</td>
</tr>
<tr>
<td>Activity instructions</td>
<td>✓</td>
</tr>
<tr>
<td>Summaries</td>
<td>Personal comments</td>
</tr>
<tr>
<td></td>
<td>Elicitation of student contribution</td>
</tr>
<tr>
<td></td>
<td>Teacher as bilingual</td>
</tr>
<tr>
<td><strong>Teacher B</strong></td>
<td></td>
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<tr>
<td>Amount of L1:</td>
<td></td>
</tr>
<tr>
<td>Between 10 % and 20 %</td>
<td>13.2 % L1 average</td>
</tr>
<tr>
<td>Purposes of L1:</td>
<td></td>
</tr>
<tr>
<td>Vocabulary explanations</td>
<td>✓</td>
</tr>
<tr>
<td>Tests and exams announcement</td>
<td>✓</td>
</tr>
<tr>
<td>Administrative issues</td>
<td>Activity instructions</td>
</tr>
<tr>
<td></td>
<td>Elicitation of student contribution</td>
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<tr>
<td></td>
<td>Extensive translations</td>
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</table>

Overall, Teacher A’s assessment of his L1 use was accurate. Considering first the amount of L1, Teacher A estimated that he did not use more than 10 % of L1 during his teaching. The word count procedure revealed that Teacher A indeed had stayed below 10 % with an average amount of 9.3 % L1. Teacher B also provided an accurate assessment of how much she used L1 in class. She estimated that she used between 10 %
and 20% L1, which corresponded to an average of 13.2% found in her classroom practice.

When asked to name purposes for which he used L1 in class, Teacher A mentioned announcing exams and talking about their preparation, clarifying vocabulary, giving directions for activities, and providing summaries. A comparison with the classroom data substantiated these judgements. While no explicit functional categories called *Clarifying vocabulary* and *Providing summaries* was part of the coding scheme, these purposes of L1 can be grouped under the functional category of *Translation*. Thus, although Teacher A did not explicitly mention translation, his description of using L1 for the purposes of clarifying vocabulary and providing summaries compared with the moderate amount of 21.6% of L1 use for translation provides evidence of language awareness concerning this aspect of L1 use.

Nevertheless, there were three further purposes of L1 use which Teacher A did not explicitly state in the interview. Teacher A remarked that it might be possible that he was not always aware of which language he was using in class. This judgement seems appropriate considering that he did not mention that he often incorporated L1 into his L2 speech, captured by the category of *Teacher as bilingual*. Furthermore, it appears that Teacher A was not aware that he often used L1 (19.9%) to make personal comments and thus contribute to classroom proceedings. Moreover, Teacher A did not refer to the fact that he used L1 to elicit student contributions.

These observations point to a partial lack of awareness on Teacher A's part. However, the remarks about his language awareness and correct description of L1 amount and purposes show a considerable sensitivity regarding the use of L1.
Furthermore, the in-class observation that Teacher A often explicitly addressed the choice of language during the course of the lesson e.g., by announcing that he was going to make the following statements in English, suggest that Teacher A had a high degree of awareness of his language choice.

Regarding the purposes for which Teacher B used L1, she mentioned that she employed L1 to explain vocabulary, to give information about tests and exams, to deal with administrative issues and on occasions where student questions were expected. While the last purpose is difficult to substantiate because of its subjectivity, the data revealed examples of the former purposes. However, it was observed that Teacher B did not only use L1 to clarify vocabulary. She used it extensively to translate any kind of statement made during the course of the lesson and thus defined the purpose of using L1 to explain vocabulary too narrow.

The tendency to translate can be related to statements Teacher B made during the interview that pertained to the effectiveness of circumlocution and the habit of using L1 in the first-year grammar courses. Teacher B had expressed some doubt about the usefulness of circumlocution in the second-year course level. This hesitancy regarding the use of paraphrasing was substantiated by data gathered in her classrooms. It was observed that although there were occasions when she used circumlocution, there was a strong tendency to provide L1 translation immediately after an L2 sentence. The tendency was corroborated by the quantification of Teacher B’s classroom functions of which 41.8% were translations.

Furthermore, although Teacher B stated that she usually judged student comprehension from facial expressions and the responses that were offered, it was
observed that she often did not leave any time for students to process what she had just said. Thus, students did not have time to express incomprehension or ask for clarification because Teacher B regularly supplied translations.

Teacher B also did not report on using L1 for giving instructions and eliciting student contributions. The apparent lack of awareness concerning giving instructions is interesting to note, particularly because she did not only provide instructions when the activity was complicated and involved but included simple directions such as “[Student name], could you start”, which the student certainly would have understood in L2.

When considering the data collected in the interview and in the classroom, it can be noted that Teacher B did not name several L1 purposes and seemed unaware of the extent of her translations in her classes. However, she correctly estimated the amount of L1 she used in class and named several purposes of L1 use. Furthermore, she mentioned that she had noticed herself switch to L1 unexpectedly, which provides evidence of a high degree of language awareness.

Altogether, the data presented in the above section suggest that although both teachers showed awareness with respect to amount and certain purposes of L1, both teachers were unaware of some purposes of their L1 use. Furthermore, the data suggest that Teacher B had a slightly lower degree of awareness of her L1 use than Teacher A.
4.3. 3 Stimulated Recall Data: Teacher A and Teacher B

The stimulated recall procedure was used to gather data on the teachers’ reasoning of why they used L1 in their classrooms. During the stimulated recall sessions, the individual teachers were shown 20 episodes from their teaching, in which they had employed L1. Watching themselves teach and use L1 was expected to trigger thoughts they had had during the moments of using L1. After every brief classroom episode, the disc was stopped and the teachers were asked why they had used L1 during that instance. The data from the stimulated recall sessions provided a further perspective on the thinking processes of the teachers concerning their L1 use.

The stimulated recall sessions were recorded and transcribed. The teachers’ statements in response to watching the L1 episodes were analyzed in terms of thematic points. It became evident that many of the thematic points had been encountered in the interview data. Thus, the thematic points that arose from the stimulated recall data were grouped under the categories of Factors of teachers’ L1 use, Purposes of L1 use, and Awareness of L1 use. Table 11 illustrates the teachers’ thematic points from the stimulated recall data.
Table 11
*Teachers’ Stimulated Recall Categories*

<table>
<thead>
<tr>
<th>Thematic points Teacher A</th>
<th>Thematic categories</th>
<th>Thematic points Teacher B</th>
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</thead>
<tbody>
<tr>
<td>1. Factors influencing teachers’ L1 use</td>
<td></td>
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<tr>
<td>- Students’ low proficiency level</td>
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<tr>
<td>- Set-up of German classes at the university and saving time</td>
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<tr>
<td>- Variability of individual classes</td>
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<tr>
<td>- Bilingual context</td>
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<tr>
<td>- Desirability of L1 use</td>
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<td></td>
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<tr>
<td>2. Purposes of L1 use</td>
<td></td>
<td></td>
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<tr>
<td>- Comprehension check</td>
<td></td>
<td></td>
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<tr>
<td>- Student motivation</td>
<td></td>
<td></td>
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<tr>
<td>- In-class purposes of L1 use: closing theme, summary, transition</td>
<td></td>
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<tr>
<td>- Humour</td>
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<tr>
<td>- Expression of displeasure</td>
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<tr>
<td>3. Awareness of L1 use</td>
<td></td>
<td></td>
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<tr>
<td>- Spontaneous L1 use</td>
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<td></td>
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<tr>
<td>- Mumbling in L1 and different roles of L1 and L2</td>
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<td></td>
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<tr>
<td>- Habit of using L1</td>
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<tr>
<td>- Unintentional L1 use</td>
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<tr>
<td>- Mumbling in L1 and different roles of L1 and L2</td>
<td></td>
<td></td>
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<tr>
<td>- Acoustic layout of classroom</td>
<td></td>
<td></td>
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<tr>
<td>- Interpretation of student reactions</td>
<td></td>
<td></td>
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<tr>
<td>- Speed of discourse</td>
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</tbody>
</table>
1. Factors influencing teachers' L1 use

The stimulated recall category of *Factors influencing teachers' L1 use* comprised eight thematic points of students' low proficiency level, acoustic layout of Teacher B's classroom, set-up of the German classes at the university, interpretation of student reactions, variability of individual classes, speed of discourse, bilingual context, and the desirability of L1 use.

- Students' low proficiency level

In response to episode 1, in which Teacher A checked students' comprehension with the words: "That was a mouthful, did you get that?", he replied:

That was the problem with this level. On the one hand, the material is supposed to be tangible and even be possibly intellectually stimulating, so not just to talk about the origins of the pretzel. On the other hand, they simply don't know the language to be able to truly express things.

- Acoustic layout of classroom

After watching episode 1, in which Teacher B summarized a previous L2 statement in L1, she remarked: "One problem was that the people could hardly understand each other because the room was bad for acoustics."
- Set-up of the German courses at the university and saving time

With reference to episode 3, in which Teacher A provided a summary of an activity instruction, Teacher A stated:

Saving time is a central aspect. Every few years there are new text books and we discuss what is doable within what kind of time frame and for grammar this is more so than in this conversation course. Maybe it's more effective to do it all in German but it would take so much more time and we only have these four years till graduation in which the students are expected to go from zero to the conjunctive. Sometimes it is necessary to be quick and to the point and English is more efficient than circumlocution.

- Interpretation of student reactions

In response to episode 4, 6, 13, and 16, in which Teacher B provided translations for L2 statements, she said:

Usually the good students understand it and they answer right away. But if there isn't an immediate answer even from them like yes or no and they just look at you then it's a sign that I hadn't expressed it in a good way. Also, I can tell because in the groups the discussion starts, what are we supposed to do, what did she say?

- Variability of individual classes

After viewing the first five episodes, Teacher A said:

I am surprised to see how much German I used. Normally, this would be the third-year level to just start talking. But you go with the class. If you have the impression they follow you...you look at facial expressions, what questions they answer and if there are no complaints, then it (the mixture of L1 and L2) settles on a certain level.
- Speed of discourse

In response to episode 7, in which Teacher B repeated her L2 question in L1, she remarked:

I think I said the German version relatively quickly whatever came to my mind and so I repeated it in English. I think I often spoke too fast and instead of repeating it slowly in German, I said it in English.

- Bilingual context

In episode 20, Teacher A was shown a sequence in which, while considering art, he provided an English quote from a movie:

Es gab eine sehr schöne Episode im Star Trek, in einem Star Trek Film [There was a very nice episode in Star Trek, in a Star Trek movie]. Da haben sie gesagt, oh ja [There they said oh yes] the literary grace of the 20th century, Daniel Steele and Stephen King, do you remember? Wer weiß was in 100 Jahren noch gelesen wird [Who knows what will be read in a 100 years].

In recalling the context, Teacher A remarked:

It was a little anecdote as an example for the relativity of art. It was in English because it came from English. I threw it in spontaneously and it just happened really fast. I had never said it in German.

- Desirability of L1 use

In response to episode 8, in which he elicited student contributions, Teacher A said:

On this level, it is an enormous balancing act to make it as interesting as possible but to keep it on a language level they can master. You also don’t want to scare them with the teacher talking about all this stuff. To expect that this second-year course is completely carried out in German is a bit too much to ask.
2. Purposes of L1 use

The second stimulated recall category contained the five thematic points of comprehension check and saving time, student motivation, in-class purposes, humour, and expression of displeasure.

- Comprehension check and saving time

In episode 10, the class discussed a music video dealing with the state of the world.

Teacher A first asked a question in German, then rephrased the question in L1. After watching the episode, Teacher A said:

I repeated my question but not [the word] *alternative* because it’s the same word. If there was something immediately from the students I probably wouldn’t repeat it but if there is nothing or to make sure they understand. On this level, it is appropriate to repeat the gist in English.

After watching episodes 4, 5, 14, and 18, in which Teacher B provided immediate translations for questions and a cartoon description, she said:

It was as an aid for comprehension, to make it clear what I want from them. I used English to ensure that they understood what was happening in the cartoon. I felt the context wasn’t clear and the speak bubble was really small so I explained it automatically. Sure, that’s the last way, I say it in English and then we can continue to talk about things. I could have tried to say it three times in German but it’s simply easier!

- Student motivation

During episode 2, in which Teacher A discussed the topic of sexism in the English language and then asked students a question, they did not immediately respond but
mumbled amongst each other. Teacher A commented on the proceedings with the words: “A general murmur.” After reviewing the episode, Teacher A declared:

At that moment, I could see that students were thinking of something to say but their language level is so low that they cannot produce anything tangible. This comment was meant to acknowledge their efforts, to take away their anxiety, and to encourage them so they know they don’t have to produce the most eloquent things. This is important because although they try, they simply can’t say much in German. If they experience this inability to express themselves too often, they may stop trying altogether.

After viewing episodes 5 and 14, in which Teacher B translated questions addressed to the students, she noted:

I started to speak English, asked them whether they had understood to encourage them to talk and tell me what they had understood. It was to encourage them to at least say something so that they know what I want from them.

- In-class purposes

After watching episode 9, in which Teacher A provided a summary of a previous statement after a student had asked about a word, Teacher A stated: “I repeated it as a closing theme, as a summary and transition. I think I also didn’t know what to do next so I repeated it.” In episode 7 and 18, in which Teacher B provided a translation and an explanation of a word in L1, she said: “Role model is not a word I would expect them to know. It was a word explanation because I didn’t think they would understand any of the synonyms.”
- Humour

During episode 4, which also reflects the humourous gist of episode 2, 11, 17, and 18, Teacher A presented the students with pictures of six persons of contemporary pop culture. During the discussion, which took place amidst much laughter, students were asked who they would consider a role model. Teacher A added: "I am not going to tell anybody what you said in class." After reflecting on the episode, he remarked:

I guess this is my ubiquitous humour to relax the students to get them talking. As long as they laugh and smile and it works, I do it. Having them laugh and smile is not only a way to encourage them to participate in class. It also shows me they are paying attention. In a way, this humour also sometimes helps to hide my own nervousness.

- Expression of displeasure

Episode 14 that was presented to Teacher A had been taken from class 3 for which students had not properly prepared. During the episode, Teacher A tried to elicit student answers about the text they had been supposed to study. He asked repeatedly whether students had understood the text in German and English. After reviewing the episode, Teacher A remarked:

This class didn’t go so well. I was frustrated because they didn’t prepare the text I had given them for homework and they didn’t speak up. At that point, I wanted to know whether they had understood the vocabulary. Es war ein Schlag [it was a blow], ‘so you didn’t understand it’, wie eine Schelte und auf englisch verstehen sie es dann auf jeden Fall [like a scolding and in English they understand it for sure].
3. Awareness of L1

The last stimulated recall category contained five thematic points pertaining to the habit of L1 use, unintentional L1 use, spontaneous L1 use, mumbling in L1 and the different roles of L1 and L2.

- Habit of using L1

In episodes 8 and 19, Teacher B switched from L2 to L1 to address a student and the class, respectively. After viewing the episodes, she said:

It came automatically, stupid in a way, I didn’t need to say it. It’s like a compulsion, I repeat it automatically in English to make sure they understand me. This probably wouldn’t have been necessary in this conversation course but I was so used to it from the first-year grammar course where I’d say it in German and of course they don’t understand me and I carried it over to the conversation course. It seems to have become a habit.

- Unintentional L1 use

In response to episode 3, Teacher B said: “I wanted to make sure that they know what that word means in English. Then I slipped into English without intention because I was using these English concepts. You have to really concentrate not to slip into that language.”

- Spontaneous L1 use

In response to episode 2, 4, and 11, Teacher A stated:

A lot of the episodes, it was spontaneous, to relax them with the jokes. I always intensely prepare for my lessons, the points I will cover. But those moments, it’s totally spontaneous and I had not planned that I would use English at that moment.
- Mumbling in L1 and different roles of L1 and L2

In response to episode 7, 15, and 19, in which Teacher A spoke to himself in L1, he commented:

Obviously I mumble a lot to myself in English. English is my main language outside the classroom and I don’t speak much German elsewhere. So when I mumble things to myself it is in English because German is the language for the students.

After watching episode 2, in which Teacher B mumbled a comment about class material to herself, she noted:

Often times I mumbled things to myself in English although it’s not my mother tongue. Maybe it was also because it was so much fun to speak in English, thinking, now I am in this English context, in class with English native speakers, now I pretend to be one of them.

In episodes 8, which represents the same theme as episode 10 and 19, Teacher B, although initially using L2, switched to L1 to address a student:

Was haben wir hier, Bodybilder-Frau [What do we have here, bodybuilder woman] ... Benutze wahrscheinlich Drogen, nicht positiv und nicht gesund [Probably uses drugs, not positive and not healthy]. Is that what you want to say, nicht gesund [not healthy]?

After viewing the episodes, Teacher B remarked:

It’s like appealing to the mother tongue, to be on the same level as [the student] to talk about German so he can tell me whether that’s what he wanted to say. Dumb really, I don’t know. It is as if I leave the instruction realm and talk to you [the student] as a native speaker of English. To go on that level, talk about what is to be done, everyone knows, good, so we can speak German again... It’s a juggling act between the two language levels. I know I did that often especially when I called on students. I could have said it in German but in certain situations it was automatic for me that I asked in English so they feel addressed by me and give me an answer because they understand it.

Furthermore, in response to episode 9 and 15 in which Teacher B dealt with class material at the beginning of class, she said:
It wasn’t so important, it didn’t really have anything to do with the instruction itself, it was more background information. Often at the beginning I still spoke English, as if a preparation for the real class and then, okay, now we speak German.

What can be drawn from the stimulated recall session data are several observations. Firstly, many of the thematic points the teachers mentioned during the interviews resurfaced during the stimulated recall sessions (see Table 9 and 11 for a comparison between the thematic points of the interviews and stimulated recall sessions). Thus, despite their difference in teaching experience, the teachers consistently described thematic points that they encounter in their teaching experience such as the impact of teaching in a foreign language context, the set-up of German classes at UVic, L1 as a tool to check student comprehension and to motivate students.

Secondly, the stimulated recall sessions further prompted both teachers to identify points that they had not previously mentioned. Teacher A, e.g., described the impact of the bilingual context, L1 use as a spontaneous act, L1 use for expressing displeasure, mumbling in L1 and the different roles of L1 and L2, and expressing humour. Teacher B commented on new aspects such as the acoustic layout of the classroom, the interpretation of student reactions, the speed of her discourse, the habit and unintentional use of L1, and mumbling and the different roles of L1 and L2.

Teacher A’s comment regarding the bilingual context and the spontaneous use of L1 suggests that the foreign language context is a situation in which both languages are present in the teacher’s mind. Although he is proficient in L2, his mother tongue, daily life is conducted in L1 and thus represents the teacher’s dominant language. Teacher A confirmed this reasoning by noticing how he used L1 to mumble to himself when the
language was not directed at the students because L1 was his "main language and German the language for the students". He thus indirectly described separate roles of L1 and L2, a point that arose more explicitly with Teacher B.

When teachers are exposed to a bilingual context, they make new memories in both languages. It is understandable that an experience lived in the students' L1 and relevant to the L2 teaching context would be spontaneously recalled and added to the flow of the lesson. Nevertheless, while the incorporation of L1 material is reflective of the teachers' bilingual status, it is important to strive for awareness that allows teachers to make a conscious choice regarding the extent to which they incorporate L1. Thus, as Teacher A mentioned, there were many moments during which L1 use was spontaneous and not a conscious choice. It follows that the longer a teacher lives in a bilingual context and the less the mother tongue is used as the medium for meaningful communication outside of class, the more a teacher needs to make the effort to be aware of his or her language choices.

Teacher B also commented on mumbling in L1 and sometimes slipping unintentionally into it although she had been in an English-speaking context for only eight months at the time of the stimulated recall session. While describing her L1 and L2 use, Teacher B identified the use of L1 and L2 as taking place on different levels. Teacher B distinguished the role of L1 as being her real language in communication with her native speaker students from L2 as being the instructional language. Thus, although Teacher B had been exposed to the bilingual context considerably less time than Teacher A, the findings suggest that it nevertheless influenced Teacher B's access to the
respective languages in her mind. Furthermore, the bilingual context affected her attitude toward which language was preferable in which context.

During the stimulated recall session, Teacher B further noted the factors of the acoustic layout of the classroom and the importance of student feedback that had an impact on her L1 use. She considered the use of L1 necessary to counteract the poor acoustics of the classroom. However, with reference to attending to student feedback, an interesting incongruity became apparent. Teacher B quoted this aspect as one of the reasons for using L1. Yet, she seemed to remain unaware that she often left no time for students to process the L2 input and to convey signals of incomprehension before she provided L1 translations, although the stimulated recall session contained three episodes of such instances. The lack of comments concerning these incidents indicate that Teacher B did not notice this practice. This suggests that while watching oneself teach provides the opportunity to notice aspects of one’s teaching, it may not suffice to draw a teacher’s attention to all important facets of his or her practice.

Consequently, teachers who live and work in a bilingual context may benefit from raising their language awareness so that they can consciously adjust levels of L1 and L2 use. Results suggest that watching themselves teach may be a valuable tool to help teachers to become more aware of characteristics of their teaching practice and their language use. However, further outside feedback, e.g., offered from a colleague who watches the video with the teacher, may be necessary so that the teacher’s attention may be drawn to salient details of their practice which otherwise may escape their attention.
4. 4 Summary

This chapter provided a description of the results that were extracted from the data collected in the classroom, the interviews, and the stimulated recall sessions. Results revealed differences and commonalities between the two pedagogues, of which one was an experienced and the other an inexperienced language teacher.

The two teachers did not differ significantly in the amount of L1 they used during their classroom practice, which suggests that this was not an area that was reflective of their differing teaching experience. With an average of 11.3% L1 across all eight classes, Teacher A used an average of 9.3% L1 and Teacher B 13.2% L1.

However, when considering the purposes for which the teachers used L1, several significant differences emerged. Most notably, the teachers differed with respect to the extent that they used L1 for providing translations and adding personal comments to the course of the lesson. Thus, teaching experience may have led Teacher A to use fewer translations but to employ L1 for adding personal comments to the lesson and thus building rapport with the students.

The interview data revealed that both teachers commented on common factors that necessitated the use of L1 in the second-year course level. Both discussed the difference between second and foreign language environment, the focus on grammar in first-year courses as well as the work load expected to be covered within four years until graduation. Teacher A also described the dilemma of wanting to offer students intellectually stimulating course material and yet being hindered by their limited language abilities.
When asked to judge the amount and purposes for which they used L1 in class, both teachers provided an accurate estimation of the amount of L1 use. However, although Teacher A offered a somewhat more comprehensive description of the purposes for which he used L1 than Teacher B, both teachers did not mention several purposes for which they had used L1. Nevertheless, the observation that Teacher A often addressed the language choice in class suggests that he may be slightly more aware of his language use than Teacher B.

In the stimulated recall sessions, the teachers offered comments on why they had used L1 in response to viewing a series of short episodes from their teaching. The comments confirmed what had arisen during the interviews but also included remarks that pointed to an emerging awareness concerning their language use. Thus, the teachers’ responses suggest the presence of a distinction between the roles of L1 and L2 in their minds, in which L2 is the instructional language for the students and L1 is the “real” language for expressing oneself and for connecting to the students as native speakers of English. This may cause them to unconsciously employ L1 to a larger extent than is necessary and take away beneficial opportunities for meaningful interaction with the students. These findings suggest that teachers who live and teach in a bilingual context need to make an effort to raise their language awareness so that they can make conscious language choices in class. A valuable tool may be to video record and watch themselves teach, which in the case of this study helped the teachers become more aware of aspects of their language use and teaching practice.
Chapter 5  
Discussion and Conclusion

5.1 Discussion and Conclusion

The present study was aimed at investigating the amount and the purposes for which two native German teachers used their students' first language to teach German in a university setting. Furthermore, it explored the teachers' awareness of their L1 use.

In order to discuss the findings of the study, results are considered with respect to the research questions that guided the inquiry. For the convenience of the reader, they are repeated below:

1. To what extent do the participating teachers use L1 in their L2 classrooms?
2. For what purposes do they use L1?
3. To what extent are they aware of the amount and the purposes of their L1 use in their L2 classrooms?
4. Are there any differences in L1 use between the two teachers? If there are any, what could be the sources of the differences?

Research question 1

The first research question was concerned with the amount of L1 that the teachers used in their classroom practice. The word count procedure revealed an average L1 use of 11.3% in both classes. This is comparable to averages found by other studies: 6.9% L1 in French secondary school classes (Macaro, 2001), 7.2% L1 in a German university class (Duff & Polio, 1990), and 8.8% in French university classes (Rolin-Ianziti & Brownlie, 2002).
The amount of L1 found in the present study was slightly higher than in those quoted above. It ranged between 4.6 % (Teacher A) and 25.1 % (Teacher B). However, in its variability, it was comparable to other studies: 0 % to 18.1 % L1 (Rolin-Ianziti & Brownlie, 2002), 0 % to 15.2 % L1 (Macaro, 2001), and even 0 % to 90 % L1 (Duff & Polio, 1990). This range in L1 use suggests that it is dependent on class circumstances and cannot be predicted based on the average amount of L1 a teacher uses.

There are several reasons for the slightly elevated amount of L1 found in the present study. One may be due to the setup of the study while others appear to be more participant-related. For example, a difference in data collection can be noted between the present study, which included all teacher talk during the lesson, and Rolin-Ianziti and Brownlie’s (2002) study, which only transcribed and calculated L1 amounts for clearly instructional parts of lessons. Thus, the L1 amount found in the present study also pertained to announcements which, in the case of Teacher B, were extensively made in L1.

Furthermore, it should be noted that studies have employed different research methods pertaining to measuring the amount of L1. For example, Rolin-Ianziti and Brownlie (2002) worked with a word count procedure to determine the ratio of L1 and L2 as was the case in the present study. However, Duff and Polio (1990) as well as Macaro (2001) relied on different time coding schemes, in which the language of the interaction was sampled every 15 and 5 seconds, respectively. Results attained with the word count procedure may be comparable to studies with different language coding techniques. Nevertheless, a project contrasting the different methods based on the same data is needed to establish a reliable relationship between the two coding methods.
Another reason for the increased L1 amount may be a participant-related reason and the fact that teachers adjust their L1/L2 talk according to the language proficiency level of their students. As has been discussed in the literature (e.g., Rössel, 1994; Kaneko, 1992), teachers tend to use more L1 with lower-level language students. Both Teacher A and Teacher B made reference to the limited language abilities of their students during the interviews and the stimulated recall sessions. However, the need to use more L1 with low-level students seems not solely due to the inability of students to follow the lesson. As Teacher A explained, student incomprehension had further implications on the students' morale, i.e., students experienced a decrease in motivation that reached as far as a drop in enrollment numbers.

Finally, it is informative to consider the results of the present study with respect to the concern of some theorists and practitioners that oppose the use of L1. They argue that if not all classroom proceedings are carried out in L2, "it is possible that the mother tongue is spoken by the teacher more often than the foreign language" (Chambers, 1999, p. 27). Based on an average L1 use of 11.3 % in the present study and lower quantities of L1 in other research findings (see above), there seems no grounds for such fears.

While it is important for language teachers to monitor their L1 use, it appears unlikely that L1 would take over as the predominant medium in class. Consequently, with respect to 11.3 % L1 in the present study, Atkinson's (1987) suggestion of striving for a ratio of 95 % L2 and 5 % L1 in the language classroom seems like a plausible guideline that allows limited L1 recourse without taking away from L2 exposure.
Research question 2

The second research question was concerned with the purposes for which the teachers used L1. Teacher A used L1 most often for the purposes of translation, personal comment, activity instruction, and teacher as bilingual. Teacher B used L1 for the purposes of translation, administrative issues, and activity instruction. Aside from grammar-related L1 use which other research has reported on, the findings of the present study concur with those of previous studies. Thus, L1 was used for translating, giving instructions (Rolin-Ianziti & Brownlie, 2002) as well as for bilingual use of L1, and joking with students (Polio & Duff, 1994). These purposes suggest that the teachers use L1 to make L2 classroom activities accessible for students. Furthermore, by adding personal comments to the class and using L1 as an expression of their bilingual status, the teachers contribute a personal note to the lesson.

Many opponents of L1 use (e.g., Chambers, 1991) maintain that instructions should be provided in L2 in order to maximize the input of L2. However, based on the fact that language classes take place within a limited time frame, many theorists and practitioner alike (e.g., Macaro, 2001; Tang, 2002; Atkinson, 1987) question the value of providing lengthy procedural instructions in L2 when the results are frustrated students who still have not understood. Results showed that the teachers in the present study used an average of 12.7% L1 for the purpose of providing activity instructions. Providing activity instructions in L1 allows students to quickly engage with and practice using L2. The findings suggest that giving activity instructions in L1 is an important time saver.

A further interesting purpose of L1 use was that of teacher as bilingual. This purpose captured L1 use in which the teachers incorporated L1 words from their
surrounding environment into their L2 speech. The use of L1 related to bilingual concepts illustrates that the teachers’ L1 use cannot be considered in isolation from the living context of the speakers. The teachers’ incorporation of L1 words from the surrounding L1 culture reflects the foreign language context in which the language instruction is embedded. Teachers and students alike are accustomed to using L1 terms such as spring break or final in L2 classes and may not have made an effort to search for L2 equivalents. Sometimes, translations for such terms may not exist due to the different instructional systems. However, it could also be possible that the reason why teachers prefer using L1 terms for academic events is because these words are landmarks in the students’ lives and serve to instantaneously grasp their attention when the rest of the utterance is spoken in L2.

Therefore, the teachers’ use of L1 words from the L1 culture and instances of arbitrary codemixing reflect the fact that the teachers truly are bilingual persons. Bilingual persons “normally use their languages - separately or together - for different purposes, in different domains of life, with different people” (Grosjean, 1995, p. 259). After having lived and worked in Canada for two decades, Teacher A is proficient in both (the students’) L1 and L2. Thus, when he accesses information that was experienced in L1, it is recalled and recounted in L1. Teacher A confirmed this reasoning with a comment concerning an L1 anecdote he had provided in class: “I said it in English because it came from English”.

However, as research has shown (e.g., Blom & Gomperz, 1972) bilinguals are often unaware of which language they use. Yet, as Freeman (1989) argues, without awareness of a certain behavioural trait, it is difficult to address and change it. Thus, it
requires a conscious effort to distinguish between the languages one is using and by extension, to make a conscious choice of which language to employ.

As language choice in a bilingual setting is a means to express solidarity with the speakers of the language (O’Grady & Archibald, 2000), the incorporation of L1 into L2 class discourse suggests to be a teacher strategy to express solidarity with students. This is supported by the remarks of both teachers that recourse to L1 served to motivate students and helped not to scare them in the process of learning language. Thus, if affective factors influence language learning success (Brown, 2000), lowering students’ affective threshold by using L1 can assist in the taxing process of making students feel comfortable with and receptive to the new language. Therefore, the insistence on a maximal exposure to L2 may cause more frustration and lack of receptiveness than any amount of L2 input may remedy, particularly among low-level language learners.

Consequently, teachers employ L1 for a variety of purposes that may help students in the process of learning language. Results suggest that L1 plays a role to make L2 input comprehensible, for teachers to express themselves, to build rapport with the students, and to motivate them. Furthermore, L1 may be useful to catch students’ attention, to signal that it is their turn to participate, and to address the process of L2 learning.

Research question 3

The third research question addressed the teachers’ awareness pertaining to the amount and the purposes for which they used L1. Freeman (1989) describes awareness as “the capacity to recognize and monitor the attention one is giving or has given to
something” (p. 33). With regards to the teachers’ awareness, results from a comparison between what the teachers said with what they did in classroom practice showed that both Teacher A and Teacher B were aware of their L1 use to a certain extent. The teachers’ accurate estimation of the L1 amount and a description of some of the L1 classroom purposes confirmed their awareness of these aspects of L1 use. However, neither instructor gave a full account of the purposes for which they used L1. For example, Teacher A seemed unaware that he used L1 to add personal comments to the course of the lesson. Teacher B appeared unaware that she translated regularly and gave instructions in L1.

The teachers’ comments during the interviews and stimulated recall sessions provided further information concerning their awareness of L1 use. Particularly the video segments of their teaching that provided the teachers with visual and audio feedback of their L1 use triggered comments that pointed to an emerging awareness of previously unknown aspects of their teaching.

For example, after watching stimulated recall episodes, Teacher A commented on several aspects of his L1 use that suggested a previous unawareness. He was surprised at the high amount of L2 he had used in the course (and by extension, the low amount of L1). He also seemed to have been unaware of the extent to which he spontaneously used L1 to express humour to relax and motivate the students. Furthermore, he realized that he mumbled to himself in L1 because English was his main language outside the classroom and German was the language for the students. These comments point to a differentiation of the roles of the languages in the teacher’s mind, a point that Teacher B discussed more explicitly in the course of the stimulated recall session.
Teacher A’s comments that were triggered by the stimulated recall session suggest that although he was aware that L1 played a role in his practice, his attention had not encompassed all aspects thereof. This implies that even experienced teachers who have a degree of awareness that allows them to consciously use L1 in their teaching need to work on expanding their language awareness. This will enable them to weigh the usefulness of L1 every time they use it during the lesson.

Teacher B similarly underwent a shift in awareness, triggered by watching the stimulated recall episodes in which she had used L1. Teacher B realized the extent of her habit to translate, resulting in comments that expressed irritation. She noted that besides having adopted the habit to translate from the first-year grammar courses, a further reason for her frequent translations was the fact that she often spoke too fast. Instead of rephrasing in L2, she translated. Nevertheless, although faced with evidence in the video episodes, Teacher B did not seem to notice that she often translated without giving students time to process the L2 input and express incomprehension. Consequently, watching herself use L1 in class led Teacher B to pay attention to certain aspects of her L1 use and to become aware of them, while she remained unaware of other aspects of her L1 use. This suggests that video feedback may be a valuable tool for professional development but may not suffice to alert teachers to all facets of their teaching practice.

However, the visual feedback assisted Teacher B in fully articulating an aspect of her teaching practice of which she had been aware. Teacher B mentioned that she knew that she mumbled to herself in L1, addressed students in L1 but used L2 for the instruction proper. She described that the basis for this distinction between L1 and L2 was the concept of the two languages representing different roles in the classroom. L1
was the "real" language to communicate with students and L2 the instructional language, a phenomenon that has also been observed elsewhere (see Polio & Duff, 1994). Thus, while the feedback from the stimulated recall sessions did not succeed to draw Teacher B's attention to all aspects of her L1 use, it assisted in directing and deepening attention to previously unattended details and thus expanding her awareness of L1 use.

Research Question 4

The final research question concerned the differences of L1 use between the participating teachers and inquired into the sources of possible differences. Most notably, Teacher A and Teacher B exhibited differences with respect to the purposes for which they used L1. Significant contrasts existed between the use of L1 for the purpose of translations, personal comments during the course of the lesson, and teacher as bilingual.

Although the teachers did not differ significantly with respect to the amount of L1, they varied significantly concerning how much they used L1 to provide translations. Teacher B used 41.8 % all L1 use for the purpose of translations whereas Teacher A only used 21.6 % of his L1 use for the same purpose. This shows that Teacher A found the use of L1 to be more useful for the purposes of personal comments and bilingual use, i.e., he had less need to make L2 accessible for the students than Teacher B. This may be connected to the observation that Teacher B often used complicated L2 sentences and did not resort to much circumlocution.

It was observed from the classroom data that Teacher B consistently provided immediate L1 translations after making a statement in L2. She left little time for students
to process what had just been said. The data also showed that 39.6% of Teacher B’s
translations were responses to student questions, whereas Teacher A used only 15.7% of
translations for the same purpose. This shows that although Teacher B first responded to
a student in L2, she then translated her response into L1. This confirms the teacher’s
tendency to translate and suggests that using translations may deprive students of
opportunities for meaningful L2 exchanges. Instead of adopting different strategies of
input modification to cope with the students’ incomprehension, Teacher B may not have
been aware of the extent of her L1 use or was insufficiently prepared to meet the
challenges of how to manage L1 use in this foreign language class.

The teachers also differed with respect to the extent to which they used L1 for the
purpose of adding personal comments to the course of the lesson. While Teacher A
employed 19.9% of L1 use for this purpose, Teacher B only used 4.6%. As this purpose
of L1 use is related to personal attitude to teaching, i.e., possibly the belief that adding
personal comments is an effective method to motivate students, it is reasonable to assume
that this difference is based on personal teaching style. Any comment as to how this
preference is related to teaching experience would be speculation.

Finally, the teachers showed differences concerning L1 use that was grouped in
the category of Teacher as bilingual and its two subcategories of Arbitrary codemixing
and L1 words from L1 culture. Both teachers showed a similar distribution of L1 in the
two subcategories, with L1 words from L1 culture comprising slightly more than half of
L1 use that fell under the main category. However, the teachers varied in the overall
amount that they spent on the purpose of the main category of Teacher as bilingual.
Teacher A used 15.4% L1 while Teacher B used only 5.0% L1. It is reasonable to
assume that this difference is due to the fact that Teacher A has lived in an English-speaking environment for 20 years, while Teacher B had been in Canada for eight months at the time the study was carried out. Thus, although Teacher B showed the same signs of an impact of the bilingual context on her language use, they were limited due to her shorter time of exposure.

Consequently, it can be said that while the teachers shared similarities due to teaching and living in the same foreign language bilingual context, they also exhibited several differences. Most notably, they differed with respect to the purposes for which they used L1, suggesting that years of experience and personal teaching style have an impact on how teachers use L1 in their classroom practice.

5.2 Pedagogical Implications

The findings of the present study suggest that both teachers were partly unaware of when and for what purposes they used L1. This has several pedagogical implications for teachers' professional development. If awareness of a character trait is a prerequisite for modifying it (Freeman, 1989), it follows that unless teachers are aware of their L1 use, no modification of their language behaviour can be carried out. Thus, teachers can expand their awareness of L1 use by using tools such as watching video recordings of their own teaching, possibly with a colleague who can offer further comments. This can help them to gain awareness of moments when they use L1 of which they were previously unaware and enable them to consciously choose when to integrate L1 into their practice.
Furthermore, with respect to the fact that Teacher B often resorted to translations instead of providing input modifications, many strategies can assist in delaying recourse to L1. Most importantly, instead of providing an elevated amount of translations, teachers can repeat utterances, slow down the speed of discourse, use circumlocution, and simplify syntax and vocabulary. The data also showed that Teacher B translated L2 based on the assumption that the students would not know the vocabulary. A strategy to decrease L1 translations may be to give students the chance to familiarize themselves with the L2 key terms before an activity. Additionally, using gestures, props, and visuals can assist in reducing the need for L1 use (Duff & Polio, 1990) (for an extensive discussion of further strategies, see Chambers, 1991).

Finally, findings suggest that teachers who live and work in a bilingual context need to take into account that L1 and L2 come to play different roles in the mind. Both teachers described a phenomenon in which they made the distinction between L1 as the "real" language of expression of self and for relating to students and L2 as the instructional language. Expressions of that phenomenon were that both teachers mumbled to themselves in L1 and that Teacher B often talked to students in L1, thus reducing their opportunities to engage with L2 for genuine communication. These findings suggest that teachers need to monitor and recognize the occasions during which they tend to use L1 and to make the effort to use L2 as the vehicle of meaningful interaction. This will allow students to experience the use of L2 not only for display and practice purposes but most importantly, as a means for genuine expression of mind.
5. 3 Implications for Teacher Training

The present study found that both the experienced and inexperienced teacher were partly unaware of when and for what purposes they used L1 in class. In particular, the inexperienced teacher used significantly more translations than the experienced teacher, thus limiting opportunities for students to engage with L2 for meaningful interaction. However, students’ exposure to and engagement with L2 are important factors that assist in language learning. The findings suggest that especially new teachers may benefit from awareness raising concerning L1 use and becoming skilled in using strategies of input modification instead of overusing translations.

As teacher training often takes place in second language contexts, in which native speakers are prepared to teach their language to a heterogeneous group of foreign learners, the possibility of the teacher sharing the students’ L1 is little considered. However, the context in which a native speaker is unfamiliar with the language of his or her students is unrepresentative of the majority of the world’s language teaching situations (Atkinson, 1987). Thus, instead of preparing future teachers for a second language context only, teacher trainees should equally become familiar with the challenges of the foreign language classroom.

Furthermore, teacher training should prepare future teachers for the impact of living and teaching in a bilingual context. It was found that both teachers in the study used L1 related to their bilingual context; a source of L1 use that could be decreased in favour of L2 use. Thus, teacher trainees may benefit from becoming familiar with the scenario of when the teacher is or becomes proficient in the student’s L1. This would allow new teachers to develop an awareness of the different roles that L1 and L2 come to
play in the mind. Consequently, they would be able to consciously make the effort to choose L2 as the means for genuine communication.

Connected to bilingualism is the aspect of awareness. If teachers are to make conscious choices with regards to L1 use, teacher trainees need to learn how to monitor their own language use and to be aware of how and when they use L1 in class. Auerbach (1994) suggests that “we should trust [teachers’] capacity to integrate [L1] selectively, based on critical analysis of their own contexts” (p. 158). However, results of the present study do not support the presence of a pre-existing awareness that allows teachers to focus attention on the many instances during which L1 use arises. Results suggest that there remain areas of L1 use of which teachers are not aware. However, without awareness of a behavioural trait, there can be no development and change of that trait. Consequently, teachers can benefit from expanding their attention to all aspects of L1 use in order to consciously choose when to incorporate L1 into their classroom practice.

5.4 Suggestions for Further Research

The present study examined the classroom practice of two German teachers with respect to their use and awareness of L1 use. With view to the fact that the teachers were not aware of all aspects of their L1 use, research needs to explore further details of teacher awareness concerning their L1 use. In particular, the question of how teachers’ language awareness can be raised if they are to make informed decisions concerning their L1 use merits further inquiry. Teacher responses to the stimulated recall sessions suggest that watching a video of oneself teaching is a valuable method to begin the process.
However, further research is needed to explore how this emerging awareness manifests in teachers' future practice.

One of most evident limitations of this study is its small sample size. With only two teachers as subjects of the study, the project provided insight into the classroom practice of two teachers in two second-year courses in the German department at a western Canadian university. However, results cannot be generalized beyond similar settings. Furthermore, with Teacher B being a practicum student from Germany, her background cannot necessarily be compared to other Canadian student teachers of German.

When considering the method with which the data collection was carried out, it needs to be pointed out that despite two recording devices, student contributions could often not be identified because of volume or other background noise. Although the students were not the focus of the study, their contributions in class obviously had an impact on how teachers responded and used L1. Thus, sometimes the teachers' choice of L1 had to be considered in the larger context without a student's contribution immediately preceding the teacher's use of L1.

It should also be mentioned that due to the different time slots in which the two courses took place, the chunks of classroom time that were recorded in the two classes did not capture the same lesson build-up. Teacher A's classes were recorded from midway until the end. Teacher B's classes were recorded from beginning to end. This may have made a difference concerning the equivalence of data sets.

Finally, this study is descriptive in nature, providing an overview of the ratio of L1/L2 words, the purposes for which L1 was used, and the degree of teacher awareness
connected to its use. It was not designed to examine the effects of L1 use on the
acquisition of L2 in the classes under consideration. Research methods need to be devised
to allow the collection of more empirical evidence to address the question of whether L1
use helps or hinders language learning. This question ultimately needs to be answered if
the debate in the field of second language acquisition surrounding the desirability of L1
use in language teaching is to be settled.
References


Appendix A

German Teacher Interview Questions

1. How would you describe your approach to teaching language in general?

2. And with particular reference to the context in which you teach?

3. What do you think is the role of L1 in L2 teaching?

4. Do you use any L1 in your teaching? If yes, could you estimate the amount in terms of percentages?

5. If yes, for what purposes do you use L1?

6. Are there particular activities for which, or occasions on which, you prefer to use L1 rather than L2?

7. To what extent do you think it is acceptable for students to use L1?

8. Can you think of anything that triggers the use of L1?

9. What language do you usually use outside of class with students, e.g., in the hall or during office hours? Why?

10. Do you think using L1 helps learning an L2? In what ways?
Appendix B

Transcription Conventions

<table>
<thead>
<tr>
<th>Shortform</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>*TEC</td>
<td>teacher</td>
</tr>
<tr>
<td>*STU</td>
<td>student</td>
</tr>
<tr>
<td>%com</td>
<td>comment</td>
</tr>
<tr>
<td>xxx</td>
<td>unintelligible speech</td>
</tr>
<tr>
<td>#</td>
<td>two second break</td>
</tr>
<tr>
<td>##</td>
<td>at least eight second break</td>
</tr>
<tr>
<td>+...</td>
<td>trailing off</td>
</tr>
<tr>
<td>+/-</td>
<td>interrupted</td>
</tr>
</tbody>
</table>

English words are tagged with `@e` e.g., murmur@e

- English nouns are transcribed as one word when their German equivalents are also spelled as one word.

- Title and proper names are linked with underscore, e.g., das bild heisst Zwei_nebeneinander_stehende Pavillons [the picture is called
Two_pavilions_standing_next_to_each].
Appendix C
Sample of Classroom Transcript: Teacher A

*TEC: zum beispiel hier, was wuerdet ihr sagen, ist das kunst oder keine kunst?
%com: teacher shows black and white photograph of man and woman standing on street.
*TEC: was wuerdet ihr sagen?
*STU: ja ich finde das ist kunst xx.
*TEC: es koennte eine postkarte sein?
*TEC: es koennte auch ein bild aus meinem photoalbum sein.
*STU: sie tragen typische kleider, zum beispiel.
*TEC: aber woher weisst du, dass das jetzt kunst oder nicht kunst.
*TEC: oder das ist vielleicht ein bild von meinem bruder.
*TEC: wie weiss man das?
*STU: xx meinung?
*TEC: es ist einfach eine meinung.
*TEC: die anderen, was wuerdet ihr sagen, kunst oder nicht kunst?
*STU: das sind die kinder oder die leute, just@s random@s.
*TEC: zufaellig.
*TEC: wenn man weiss, das ist ein photo von Diane_Harvos, sehr bekannt.
*TEC: in den sechziger jahren hat die immer so randgruppen dargestellt, photographiert
     in den U.S.A.
*TEC: und wenn man jetzt weiss, das ist ein photo von Diane_Harvos, dann weiss man
     sofort, das ist kunst.
*TEC: und dann schaut man das auch ganz anders an.
*TEC: das ist jetzt nicht mehr mein bruder sondern, ploetzlich symbolisieren hier was,
     die zwei, oder?
*TEC: weil wir jetzt wissen, das ist kunst.
*TEC: einfach, weil wir wissen, von wem das gemacht wurde.
*TEC: was ist hier mit?
*TEC: kunst oder nicht kunst?
*STU: xxx.
Appendix D
Sample of Classroom Transcript: Teacher B

*TEC: achtzehnhundertfuenfundsechzig wurde der allgemeine deutsche frauenverein
gegrundet, der sich zum ziel setzte, frauen sozusagen in die schulen zu bringen.

*TEC: also, dass frauen abitur machen koennen und dass frauen auch zur universitaet
gehen konnten.

*TEC: das war das ziel dieser vereinigung.

*TEC: und die erste realschule, die dann auch zum gymnasium wurde, das heisst der
erste ort, die erste schule wo maedchen abitur machen koennen where they can graduate
wurde achtzehnhundertneunundachtzig eroffnet.

*TEC: also erst dann war es moeglich, dass frauen auch auf die hoehere schule gehen
konnten.

*TEC: und die erste, die erste frau die dann in die universitaet gelangt ist sozusagen, also
in die maennerdomaene, war Lou_Andreas_Salome.

*TEC: sie war die erste gasthoererin.

*TEC: was ist eine gasthoererin oder ein gasthoerer?

*TEC: was ist das?

*STU: guest x.

*TEC: guest listener?

*STU: xxx.

*TEC: okay, what is the, was ist der eigentliche englische begriff?

*STU: auditor?

*TEC: yes, auditor.

*TEC: das hier ist ein auditor, noch nicht ein richtiger student,
sozusagen auf halbem weg zum studenten.

*TEC: she was the first auditor in a german university.

*TEC: in diese zeit faellt auch die erste welle der frauenbewegung oder die erste welle
des feminismus.

*TEC: also die frauen wie student_name schon meinte die sich das wahlrecht erkaempft
haben oder versucht haben zu erkaempfen dass sie wahlen duerfen.