A MULTIMODAL DISCOURSE ANALYSIS OF STUDENT EXPLANATIONS IN CONTENT AND LANGUAGE INTEGRATED LEARNING

A Dissertation
Submitted
to the Temple University Graduate Board

In Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education

By
Tomoko Fujimura
May, 2018

Examining Committee Members

Eton F. Churchill, Advisory Chair, Kanagawa University
David Beglar, Temple University, Teaching and Learning
Hanako Okada, External Member, Sophia University
Tamara Swenson, External Member, Osaka Jogakuin College
ABSTRACT

This study was an investigation of students’ explanations of disciplinary knowledge in content and language integrated learning (CLIL). In recent years, an increased interest in teaching content subjects in a foreign language (FL) has brought a growing body of research on CLIL (e.g., Dalton-Puffer, 2007; Llinares, Morton, & Whittaker, 2012), which has yielded valuable insights into CLIL classroom discourse. However, there is a paucity of studies that examined the development of student discourse in CLIL settings because most of existing CLIL research draws on large-scale corpus data and cross-sectional data. Thus, I investigated the processes in which students engaged with disciplinary knowledge and discourse in this case study.

The participants included 25 students enrolled in a 15-week content-based English course on sociolinguistics at a Japanese university and a teacher who taught the course. In the sociolinguistics course, the students conducted a group research project in which they carried out sequenced tasks: writing and revising a research proposal, collecting and analyzing data, and presenting findings in oral and written forms. Data were collected in the sociolinguistics course through class observations, video-recordings of the lessons, seven focal students’ group work and oral presentations, and interviews with the focal students and the teacher. Moreover, written reports by the focal students were collected. Informed by a sociocognitive approach to second language acquisition (SLA) (Atkinson, 2002; Atkinson, Churchill, Nishino, & Okada, 2007), a multimodal interaction analysis was conducted on explanations of disciplinary knowledge in the instructional and student discourses.
Data analysis suggested that content knowledge was represented at various degrees of abstraction in the textbook and teacher explanations (e.g., specific examples, decontextualized propositional claims). Moreover, the teacher drew on multimodal resources including gestures, body movement, and slides to make dense academic knowledge accessible to the students. Regarding student discourse in group work, the focal students flexibly coordinated diverse semiotic resources including talk, written texts, and gestures, which enabled them to appropriate content knowledge and advance their discussion. In this process, their explanations of disciplinary knowledge tended to change from descriptive ones to complex ones. In the oral presentations, the students made the structure of their explanations explicit and represented disciplinary knowledge at various degrees of abstraction (e.g., specific linguistic behaviors, sociolinguistic interpretations). In the question and answer sessions that followed the oral presentations, the teacher interactionally provided feedback, which likely led some students to produce more discipline-appropriate explanations (e.g., elaborated content, increased precision). Although there was a variation among the students, the written reports exhibited the increased use of metadiscourse markers including hedges, which likely resulted in careful explanations of propositional knowledge. These findings suggest that diverse discursive contexts afforded by sequenced tasks and access to varied semiotic resources can facilitate the appropriation of content knowledge by students and support the formulation of context-specific and discipline-appropriate explanations.
ACKNOWLEDGMENTS

My sincerest gratitude goes to my dissertation committee, Dr. Eton Churchill, Dr. David Beglar, Dr. Hanako Okada, and Dr. Tamara Swenson for their support and encouragement. As my advisor, Dr. Churchill helped me throughout the long dissertation writing process. At an early stage of research planning, he guided me with his insightful comments and introduced me to the research literature that I had not known. After I began writing the dissertation, he patiently read my drafts many times and gave helpful comments and encouragement. Without his guidance, my study could not have been completed. Dr. Beglar has always helped me since I joined Temple University Japan (TUJ). He gave me many encouraging comments to improve my writing. Dr. Okada provided constructive feedback on my dissertation proposal and asked me insightful questions that helped me deepen my thinking. As an external reviewer, Dr. Swenson kindly read my manuscript and gave me many helpful comments.

I would also like to thank my student and teacher participants. The students let me observe and video-record their work in class. Particularly, the focal groups kindly let me video-record their out-of-class group work and interview them. Their hard work and smiles always cheered me up. I also deeply appreciate the teacher welcoming me into his classes and generously sharing his insights through interviews.

I would like to extend my sincere gratitude to Dr. Yasushi Sekiya, Dr. Masaki Kobayashi, Professor Emi Kobayashi, Dr. Takako Nishino, and Dr. Dwight Atkinson. Dr. Sekiya encouraged me to pursue my MA in TESOL at the Monterey Institute of
International Studies (MIIS), without which I would not have written this dissertation. Dr. Masaki Kobayashi and Professor Emi Kobayashi have been my mentors in teaching and research. They generously shared their rich experience and insightful thoughts with me on numerous occasions. Dr. Nishino, whose research I admire, kindly took the time to look at my data at an early stage of the research and helped me interpret discourse data of the students’ group work. Dr. Atkinson, from whom I learned a great deal about the sociocognitive approach to SLA, gave me very warm encouragement.

I cannot forget to express my appreciation to the staff and my classmates at TUJ, and my colleagues at work. They always encouraged me and helped me in a number of ways.

My appreciation also goes to Routledge and John Benjamins Publishing Company for the permission to use materials from their books in my dissertation.

I am also grateful to my MIIS professors, Drs. John Hedgcock, Jean Turner, and Leo van Lier, for supporting my decision to pursue a doctorate at TUJ. Thank you, John, Jean, and Leo. I feel deeply honored that I was your student at MIIS.

Last but not least, I would like to thank my family from the bottom of my heart: my parents, my sister, my brother-in-law, and my niece and nephews. They have been always there and given me lots of happy moments, for which I can never thank them enough. My parents have always believed in me and given me unwavering and unconditional support. This dissertation is dedicated to my parents.
To my parents
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td></td>
<td>iii</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td></td>
<td>v</td>
</tr>
<tr>
<td>DEDICATION</td>
<td></td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td></td>
<td>xiv</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td></td>
<td>xvi</td>
</tr>
</tbody>
</table>

## CHAPTER

1. INTRODUCTION ........................................................................................................... 1
   - The Background of the Issue ................................................................................... 2
   - Statement of the Problem ....................................................................................... 4
   - Purposes of the Study ............................................................................................. 6
   - Conceptual Framework ............................................................................................ 9
   - Definition of Key Terms ....................................................................................... 9
     - Content and Language Integrated Learning (CLIL) ............................................ 9
     - Academic Discourse .......................................................................................... 10
     - Explanations ....................................................................................................... 11
     - Multimodality ...................................................................................................... 12
     - Semiotic Resources .............................................................................................. 12
     - Alignment ............................................................................................................ 13
   - The Audience for the Study .................................................................................... 13
   - Delimitations .......................................................................................................... 14
The Organization of the Study ................................................................. 16

2. REVIEW OF THE LITERATURE AND CONCEPTUAL FRAMEWORK ......... 17
Research on CLIL Classroom Discourse .............................................. 17
  Dialogic Teaching ............................................................................. 18
  The Impact of Genre on Discourse .................................................. 21
  Explaining in the Classroom ............................................................. 22
Multimodality in Academic Discourse ............................................... 31
  A Social-Semiotic Approach to Multimodal Communication .......... 31
  Multimodality in CLIL Research ..................................................... 36
  Multimodality in SLA Research ...................................................... 38
Conceptual Framework: A Sociocognitive Approach to SLA ............ 44
Gaps in the Literature ......................................................................... 45
Purpose of the Study ........................................................................... 46
Research Questions ............................................................................ 46

3. APPROACH AND METHODS .................................................................. 49
Case Study Approach .......................................................................... 49
The School and its English Curriculum .............................................. 50
The Sociolinguistics Course ............................................................... 51
The Sociolinguistics Research Project ................................................. 54
Participants .......................................................................................... 54
Ethical Considerations ......................................................................... 58
Access to the Research Site ............................................................... 59
Data Collection .................................................................................... 60
  Pilot Studies ....................................................................................... 60
### Data Collection in Spring 2015

- Background Questionnaire
- Class Observations and Field Notes
- Audio-Recordings of the Classes
- Written Data
- Video Data
- Interviews

### Data Analyses

- Classroom Observations
- Course Textbook
- Video-Recordings of Classes and Group Work
- Students’ Written Proposals and Final Reports
- Interview Data

### Validity Issues

- Researcher Bias and Reflexivity
- Strategies for Addressing Validity Threats
  - Semester-Long Data Collection
  - Prolonged Engagement and Thick Description
  - Triangulation
  - Member Checks
  - Discrepant Evidence and Negative Cases
- Positionality
  - Relationship with Students Participants
  - Relationship with the Teacher Participant

---

x
Summary........................................................................................................................................... 85

4. INSTRUCTIONAL DISCOURSE IN CONTEXT: TEXTBOOK AND TEACHER EXPLANATIONS OF DISCIPLINARY KNOWLEDGE .................. 87

Audience, Goals, and Expected Learner Roles ................................................................. 88
   Gaining Familiarity with the Overview of the Field................................................. 89
   Playing an Active Role in Disciplinary Discourse.............................................. 91

Organization of Disciplinary Knowledge in the Textbook and Lessons ............... 92
   Laying Out the Scope of Sociolinguistics.............................................................. 93
   Crafting the Topic Sequence.................................................................................. 95

   Organization of Knowledge Within a Chapter: Dialects .......................... 96

   Hybrid Organization .............................................................................................. 97

Discourse Practices in Textbook and Teacher Explanations of Dialects .......... 101
   Explicit Signaling of a Topic Shift ....................................................................... 102
   Transforming Examples to Disciplinary Knowledge........................................... 110
   Unpacking Disciplinary Knowledge................................................................... 130

   Summary....................................................................................................................... 152

5. STUDENTS’ DISCOURSE IN GROUP WORK................................................................. 155

   Conceptual Development in Intra-Group Discussions ..................................... 156
      Varies Interactional Moves and Syntactic Reformulation............................... 157
      Appropriation Through Reported Speech...................................................... 167
      Gestural Alignment ................................................................................................. 173
      Environmentally Coupled Gestures ................................................................... 179

   Student Explanations in Group Work................................................................. 193
      Addressee-Oriented Explanations................................................................. 194
      Repeated Explanations......................................................................................... 211
Summary ............................................................................................................... 219

6. STUDENT EXPLANATIONS OF DISCIPLINARY KNOWLEDGE IN ORAL PRESENTATIONS AND WRITTEN REPORTS ........................................ 221

   The Oral Presentation Context ........................................................................ 222
     Organization of Students’ Oral Presentations .............................................. 224
     Discourse Practices in Students’ Oral Explanations of Disciplinary Knowledge .......................................................... 225
       Setting up the Presentation Context .......................................................... 226
       Guiding the Audience through the Presentation ....................................... 234
       Shaping Content Knowledge ..................................................................... 240
       Q&A Sessions ............................................................................................. 247

   The Written Report Context .......................................................................... 263
     Organization of Students’ Written Reports ................................................ 264
     Discourse Practices in Students’ Written Explanations of Disciplinary Knowledge .......................................................... 265
       Extended Introduction .................................................................................. 266
       Guiding the Reader Through the Text ........................................................ 269
       Shaping Content Knowledge ..................................................................... 271

   Summary .......................................................................................................... 278

7. DISCUSSION .................................................................................................... 281

   Explanations in Instructional Discourse of the Sociolinguistics Course .......... 281
     Student Explanations of Disciplinary Knowledge ....................................... 286

8. CONCLUSIONS .............................................................................................. 290

   Summary of the Findings ................................................................................ 290
     Theoretical Implications ............................................................................. 291
     Pedagogical Implications ............................................................................ 292
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. An Outline of the English Curriculum for English Majors</td>
<td>51</td>
</tr>
<tr>
<td>2. Goals of the Sociolinguistics Course</td>
<td>52</td>
</tr>
<tr>
<td>3. Schedule of Key Tasks in the Sociolinguistics Research Project</td>
<td>54</td>
</tr>
<tr>
<td>4. Profiles of Students in Focal Groups</td>
<td>57</td>
</tr>
<tr>
<td>5. Schedule for Interviews with Students in Focal Groups</td>
<td>73</td>
</tr>
<tr>
<td>6. Schedule for Interviews with the Teacher</td>
<td>73</td>
</tr>
<tr>
<td>7. Data Analysis Sequence</td>
<td>75</td>
</tr>
<tr>
<td>8. Contents in the Course Textbook</td>
<td>90</td>
</tr>
<tr>
<td>9. Contents in the Course Textbook Chapter on Dialects</td>
<td>97</td>
</tr>
<tr>
<td>10. Types of Activities Observed in Lessons</td>
<td>101</td>
</tr>
<tr>
<td>11. Discursive Resources Used for Shifting Topics</td>
<td>110</td>
</tr>
<tr>
<td>12. Discursive Resources Used for Transforming an Example into Disciplinary Knowledge (Textbook)</td>
<td>114</td>
</tr>
<tr>
<td>13. Discursive Resources Used for Transforming an Example into Disciplinary Knowledge (Teacher)</td>
<td>129</td>
</tr>
<tr>
<td>14. Semiotic Resources Used for Code Glosses</td>
<td>135</td>
</tr>
<tr>
<td>15. Semiotic Resources Used for Exemplification (Textbook)</td>
<td>140</td>
</tr>
<tr>
<td>16. Semiotic Resources Used for Exemplification (Teacher)</td>
<td>151</td>
</tr>
<tr>
<td>17. Research Topics Chosen by Focal Groups</td>
<td>157</td>
</tr>
<tr>
<td>18. Six Sections in the Template of the Research Proposal</td>
<td>157</td>
</tr>
<tr>
<td>19. Comparison of the Number of Turns, Latching, and Overlapping Between Excerpts 5.10 and 5.11 and Excerpt 5.14</td>
<td>210</td>
</tr>
<tr>
<td>20. A Summary of the Organization of Oral Presentations of Focal Groups</td>
<td>225</td>
</tr>
</tbody>
</table>
21. Discursive Resources Used for Representing Propositional Knowledge (Group 1) .......................................................... 244

22. A Summary of the Organization of Written Reports by Focal Students ............. 265
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Explanation schema by Gaulmyn (1986)</td>
</tr>
<tr>
<td>2.</td>
<td>Schematic representation of definition vs. explanation</td>
</tr>
<tr>
<td>3.</td>
<td>Data collection schedule</td>
</tr>
<tr>
<td>4.</td>
<td>Layout of a textbook page</td>
</tr>
<tr>
<td>5.</td>
<td>Slide 1 (Lesson 13, Dialects)</td>
</tr>
<tr>
<td>6.</td>
<td>Slide 2 (Lesson 13, Dialects)</td>
</tr>
<tr>
<td>7.</td>
<td>Slide 3 (Lesson 13, Dialects)</td>
</tr>
<tr>
<td>8.</td>
<td>Slide 4 (Lesson 14, Dialects)</td>
</tr>
<tr>
<td>9.</td>
<td>Emi and Fuyu’s interactional moves and shifting use of semiotic resources</td>
</tr>
<tr>
<td>10.</td>
<td>The layout of the group study room and the location of Jun, Hiro, and tools used by them</td>
</tr>
<tr>
<td>11.</td>
<td>A photo of Jun’s writing on the whiteboard and its content</td>
</tr>
<tr>
<td>12.</td>
<td>A photo of Jun and Hiro’s writing on the whiteboard and its content</td>
</tr>
<tr>
<td>13.</td>
<td>Distinctive roles played by pointing gestures and speech</td>
</tr>
<tr>
<td>14.</td>
<td>Three phases in the representations of disciplinary knowledge by Jun and Hiro</td>
</tr>
<tr>
<td>15.</td>
<td>Slide 1 (Group 1)</td>
</tr>
<tr>
<td>16.</td>
<td>Slide 2 (Group 2)</td>
</tr>
<tr>
<td>17.</td>
<td>Slide 3 (Group 3)</td>
</tr>
<tr>
<td>18.</td>
<td>Slide 4 (Group 1)</td>
</tr>
<tr>
<td>19.</td>
<td>Slide 5a (Group 2)</td>
</tr>
<tr>
<td>20.</td>
<td>Slide 5b (Group 2)</td>
</tr>
</tbody>
</table>
CHAPTER 1
INTRODUCTION

In recent years, teaching academic subjects such as science and history in a foreign language (FL) is becoming a global trend. In this study, I investigate how university students learn disciplinary knowledge and discourse in a content and language integrated learning (CLIL) course on sociolinguistics. More specifically, I focus on the processes by which students are exposed to academic explanations, and by which students generate explanations of disciplinary knowledge through their participation in sequenced tasks during the 15-week course. Explaining is an essential academic discourse skill that students need to have in school to demonstrate their understanding of subject knowledge (Smit, 2010). In CLIL settings, the challenge is considerable for students because they need to produce explanations in a language that is not their mother tongue. Despite a growing body of research on CLIL classroom discourse, processes by which students work with subject knowledge and generate explanations have not been studied intensively because most of existing CLIL classroom research draws on large-scale corpus data (e.g., Dalton-Puffer, 2007; Llinares, Morton, & Whittaker, 2012). Therefore, I aim to investigate situated and cumulative processes in which students engage with disciplinary knowledge and discourse by adopting a case study approach (Duff, 2008; Stake, 2005; Yin, 2014). Informed by a sociocognitive approach to second language acquisition (SLA) (Atkinson, 2002, 2010, 2011; Atkinson, Churchill, Nishino, & Okada, 2007), I
examine how university students explain disciplinary knowledge about sociolinguistics using multimodal semiotic resources.

In what follows, I first describe the background of the study, the increasing attention to teaching academic subjects in FL classrooms, and its impact on language teaching and learning. I then discuss limitations of current CLIL research and the purpose of this study. In the second half of the chapter, I present the conceptual framework of the study, define key terms—CLIL, academic discourse, explanations, multimodality, semiotic resources, alignment—and explain the significance, the audience, and delimitations of the present study. Finally, I conclude this chapter by presenting the organization of the study.

The Background of the Issue

Teaching content subjects in students’ second or foreign language has a long history. Various forms of bilingual education have been practiced in different regions of the world. For instance, Canadian immersion programs are well known as a pioneering case of bilingual education and have been researched intensively (Genesee 1987; Lambert & Tucker, 1972; Swain & Lapkin, 1982). In the United States, content-based instruction (CBI) has played an important role in the context of English as a Second Language (ESL) (Grabe & Stoller, 1997).

CLIL was created and evolved in European political and educational contexts. In 1995, the European Commission stated in its White Paper that all EU citizens should be able to communicate in three languages, their mother tongue and two other European languages (Llinares et al., 2012; Mehisto, Marsh, & Frigols, 2008). This
'1+2' policy made it necessary for European schools to devise a way to teach two additional languages in the curriculum, which resulted in using foreign languages as the medium of instruction for content subjects. According to the Eurydice Network, which provides data on educational systems and policies in Europe, CLIL had become “a fast developing phenomenon across Europe” by 2006 (Eurydice, 2006, p. 55).

Moreover, CLIL is gaining attention outside Europe, too. In South America, for instance, an academic journal specializing in CLIL, *Latin American Journal of Content and Language Integrate Learning*, had its inaugural issue in 2008. In Asia, the *Asian EFL Journal* published a special edition on CLIL in 2013. In these journals, the implementation of CLIL in countries such as Columbia, Argentina, Japan, Turkey, and Abu Dhabi has been reported.

In the Japanese context, CLIL is drawing increasing interest. In recent years, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) has promoted a series of reforms in foreign language education. In 2011, English instruction was introduced in primary schools. In 2013, it was stated in the Course of Study that language activities should be conducted in English, promoting English medium instruction (EMI) in senior high school English education. At the university level, as part of the national strategic plans for the development of global human resources, courses taught in English have been highly promoted by MEXT (MEXT, 2013). In such educational contexts, CLIL has been considered to have a positive role to play (Ikeda, Pinner, Mehisto, & Marsh, 2013). Although the number of students who learn content subjects in a foreign language is still limited in Japan, in this changing educational context, it seems likely that there will be a greater need for
academic subjects to be taught in English. If this happens, insights gained from CLIL practice and research will make a valuable contribution to education in Japan.

**Statement of the Problem**

The growing interest in teaching academic subjects in foreign languages has attracted the attention of researchers examining content-based foreign language classrooms. In particular, there has been a growing interest in research on discourse in CLIL classes, making valuable insights into discursive structure in such classes available. However, CLIL research is still in its infancy. Thus, there are many areas of research that require further investigation.

First, there is a paucity of studies that examined situated processes in which students engage with disciplinary knowledge and discourse in CLIL contexts. Many existing CLIL research studies draw on large corpora (e.g., Dalton-Puffer, 2007; Llinares et al., 2012). Although these corpus studies helped to identify core features of CLIL classroom discourse such as dialogic teaching and the absence of teacher monologue, close examinations of learning processes in context were left out. As a result, there are still some important questions unanswered. For example, how do individual students learn to participate in class discourse over time? Why does the same student exhibit more active participation in certain discursive contexts and seemingly less active participation in other discursive contexts? These *how* and *why* questions cannot be addressed by large-scale corpus studies, but require more context-sensitive research methods such as a case study approach.
Second, CLIL researchers have devoted comparatively less attention to the tertiary classroom. Much of the research on CLIL classroom discourse has been so far conducted in primary and secondary schools (e.g., Dalton-Puffer, 2007; Ikeda, 2013; Llinares et al., 2012; Yamano, 2013). On the other hand, as Nikula, Dalton-Puffer, and Llinares (2013) have pointed out, research on CLIL classroom discourse in the university context is scarce. School discourse is different from the discourse that students are used to at home (Hyland, 2009). In tertiary education, the distance becomes even greater because of its dense and often abstract academic content. The distance can pose considerable challenges on students. For instance, students are expected to listen to and understand lectures in which professors explain dense disciplinary knowledge. Moreover, students need to actively take part in literacy practices such as having discussions, giving presentations, and writing research papers. In order to complete these academic tasks successfully, students need to develop an ability to produce extended explanations of target knowledge. In fact, explaining is an essential academic discourse skill (Dalton-Puffer, 2007). However, compared to teacher explanations, student-generated explanations have received less attention. In order to gain a fuller understanding of discourse practices in tertiary-level CLIL classes, there is a need to investigate how students cope with tertiary-level literacy demands and generate explanations of disciplinary knowledge in CLIL settings.

Third, CLIL research to date has been focused largely on the linguistic aspect of classroom discourse, leaving multimodal dimensions of teaching and learning largely unexamined. Classroom discourse is a complex matter. It involves not only language but also non-linguistic elements. Research has shown that when a teacher
explains subject matter in class, non-linguistic resources such as diagrams and gestures are often used (Kress et al., 2005; Lemke, 1990). It can be assumed that when students explain their developing knowledge, they also use non-linguistic semiotic resources such as gestures and facial expressions to add supplementary meaning. However, because most existing CLIL research studies take a linguistic approach (e.g., Dalton-Puffer, 2007; Llinares et al., 2012), the multimodal aspect of classroom discourse has been underrepresented in CLIL research.

In sum, although research to date on CLIL has provided useful insights into classroom discourse, further research is needed in order to understand situated processes in which students work with disciplinary knowledge and discourse. Moreover, more CLIL research is needed in tertiary education where students have to participate in complex, discipline-specific literacy practices. Finally, CLIL research should extend its scope to the multimodal aspect of teaching and learning—how knowledge is explained and worked with through multimodal discourse practices where both linguistic and non-linguistic resources play a vital role. In the next section, I describe the purposes and significance of this study.

**Purposes of the Study**

The purposes of the study are threefold: to investigate situated processes in which students engage with disciplinary knowledge and discourse in a CLIL setting, to study how university EFL students explain disciplinary knowledge, and to examine discourse practices in a CLIL course from a multimodal perspective. First, I aim to investigate situated processes in which students engage with disciplinary knowledge
and discourse in a CLIL course by employing a case study approach (Merriam, 1998; Stake, 2005; Yin, 2014). As discussed above, previous researchers have paid little attention to the process of teaching and learning in context. In this study, I have collected data in a single CLIL course for 15 weeks. Although 15 weeks might not be considered longitudinal by standards in social sciences where one year is a conventional benchmark (Young, Savola, & Phelps, 1991), length considerations of a study need to be based on ecological and practical reasons (Ortega & Byrnes, 2008). As Ortega and Byrnes (2008) pointed out, lengths of studies in applied linguistics are often determined by natural lengths of time in formal education contexts (e.g., a 15-week semester). Thus, although the length of this study does not qualify it as an ethnography, it does entail prolonged engagement in that multiple observations and video recordings were made over the course of an entire 15-week semester. As such, this study promises to make a significant contribution to current research on CLIL, which to date has been predominantly examined with cross-sectional data.

Second, a focus of the study is placed on how students explain disciplinary knowledge by participating in a CLIL course at a university. As noted above, students need to participate in various literacy practices in university classes (e.g., group discussions, oral presentations, research papers), which require an ability to understand and generate extended explanations of discipline-specific knowledge. However, because most CLIL research has been conducted in primary and secondary schools and relied on cross-sectional data, there is only a limited understanding of how university students participate in varied academic tasks and become more capable of producing discipline-appropriate explanations. Thus, I aim to contribute to current
CLIL research by examining students’ participation in such academic tasks in a university-level CLIL course and by offering insights about the development of their ability to produce extended, discipline-appropriate explanations.

Third, I examine discourse practices in a CLIL course from a multimodal perspective. As I discussed in the previous section, CLIL researchers have investigated classroom discourse largely using a linguistic approach (e.g., Dalton-Puffer, 2007; Llinares et al., 2012). However, research has shown that teaching and learning are multimodal (e.g., Kress, Jewitt, Ogborn, & Tsatsarelis, 2001; Lemke, 2002) and embodied (Atkinson et al., 2007). Thus, I adopt a sociocognitive approach to SLA (Atkinson, 2002, 2010, 2011) and examine both verbal and non-verbal semiotic resources used in instructional and student discourses. In the sociocognitive approach to SLA (Atkinson, 2002, 2010, 2011), learning takes place as participants (e.g., a teacher and a student) align with each other, themselves, and the environment. In this study, through the sociocognitive lens, I examine how students align with each other, the teacher, and academic tasks using multiple semiotic resources, such as the L1, L2, eye gaze, and gesture. Therefore, the findings of this study will provide a better understanding of the roles of multimodality in learning that have been underrepresented in CLIL and SLA research.

In sum, in order to fulfill the above three purposes, I have conducted a case study on a university-level CLIL course, focusing on multimodal aspects of teaching and learning. More specifically, I examine the development of students’ engagement with disciplinary knowledge and discourse with a focus on explanations. In the next section, I explain a conceptual framework that informs this study.
Conceptual Framework

This study is informed by a sociocognitive approach to SLA (Atkinson, 2002, 2010, 2011). Existing CLIL research has largely studied the linguistic aspect of discourse. Consequently, multimodal interaction in teaching and learning has not been studied sufficiently. A sociocognitive approach to SLA equips me with a theory of learning and methods for data analyses to fill this gap. In SLA research informed by the sociocognitive approach, it is assumed that cognition is extended into the world (Churchill, Nishino, Okada, & Atkinson, 2010) and multimodal interaction has been analyzed intensively (e.g., Atkinson et al., 2007; Nishino, 2017; Nishino & Atkinson, 2015). Drawing on the sociocognitive approach to SLA, I conduct fine-grained analyses on how students align with tasks given in a CLIL course, the teacher, and each other at different points in time in a CLIL course.

Definition of Key Terms

In this section, I define key terms in this study: content and language integrated learning (CLIL), academic discourse, explanations, multimodality, semiotic resources, and alignment.

Content and Language Integrated Learning (CLIL)

The term CLIL was coined in Europe in the mid-1990s (Mehisto et al., 2008). Today, it is used as an umbrella term to refer to various forms of content-based language teaching (Dalton-Puffer, Nikula, & Smit, 2010a), reflecting the fact that varied instantiations of CLIL are present in and outside of Europe. A review of the
literature suggests that scholars have not reached an agreement about a definition of CLIL. For example, Lasagabaster and Sierra (2010) stated that CLIL differs from immersion programs in that the language of instruction is a foreign in CLIL whereas it is not in the latter contexts. They also claimed that whereas immersion programs aim at native-speaker competence, the foreign goal is considerably lower in CLIL. On the other hand, Llinares et al. (2012) cast doubt on such a clear distinction. They pointed out that students’ exposure to the target language is largely limited to the classroom even in immersion contexts, and that a language goal of most immersion contexts is functional competence as it is in CLIL. In this study, I adopt Llinares et al. (2012)’s broad conceptualization of CLIL. Thus, CLIL is defined in this study as an educational approach where academic content is taught through a foreign language.

**Academic Discourse**

Academic discourse is an important notion in the present study. As discussed above, students need to participate in various literacy practices in university classes such as participating in group discussions, giving oral presentations, and writing research reports. Research shows that academic discourse is not a single set of conventions but varies across disciplines (Bhatia, 2002; Duff, 2010; Hyland, 2004, 2009). This means that students are not only being introduced to the content knowledge of a specific academic discipline, but also have to learn how to write and speak about this content in specific ways using the discourse of the discipline. In the present study, following the discipline-specific perspective, I adopt Duff’s (2010) definition of academic discourse. Thus, academic discourse is defined in this study as
forms of oral and written language and communication—genres, registers, graphics, linguistic structures, interactional patterns—that are privileged, expected, cultivated, conventionalized, or ritualized, and therefore, usually evaluated by instructors, institutions, editors, and others in educational and professional contexts” (p. 175). In this study, I examine how students learn disciplinary knowledge and academic discourse in a university-level CLIL course.

Explanations

There is no standardized way to identify what counts as an explanation because various kinds of information can form the content of explanation (Antaki, 1988; Draper, 1988). Social psychologists consider that explanations are constructed in social contexts. According to Hilton (1990), explaining involves “a three-place predicate: Someone explains something to someone” (p. 65). In this social approach, it becomes essential to examine explanations in context. The context-dependent characteristic is evident in the definition of explanation found in dictionaries. According to the New Oxford Dictionary of English, explaining entails making “(an idea, situation, or problem) clear to someone by describing it in more detail or revealing relevant facts or ideas” (2001, p. 647). This social approach is adopted by CLIL researchers in discourse analyses that observed that explanations are interactionally constructed in CLIL classrooms (Dalton-Puffer, 2007; Llinares & Morton, 2010; Smit, 2010). I consider that the interactional aspect of explanations is important to students’ learning of disciplinary knowledge because students’ understanding can be facilitated by additional semiotic resources made available
through interaction (e.g., repetition, paraphrasing, gesture). Therefore, I combine Smit’s (2010) definition and the one cited from the New Oxford Dictionary of English and define an explanation as an interactionally realized statement made in an attempt to make an explanandum more easily comprehensible for (an) addressee(s) by describing it in more detail or revealing relevant facts or ideas.

**Multimodality**

The present study takes a multimodal perspective to teaching and learning in order to expand its research scope to non-verbal modes of communication. In the multimodal view of communication, or a social semiotic approach to communication (Kress, 2001; Kress & Van Leeuwen, 2001), it is considered that there are always several modes of communication at work in discourse. Each mode makes its unique contribution to overall meaning. Language is one of the modes in multimodal discourse and meaning “resides” in all of the modes (Kress et al., 2001, p. 1). Other modes include gestures, eye gaze, body orientation, and intonation among others. Thus, in this study, multimodality is defined as a ubiquitous condition in which multiple semiotic modes are used in construction and communication of meaning.

**Semiotic Resources**

In a social semiotic approach to communication (Kress, 2001; Kress & Van Leeuwen, 2001), semiotic resources are defined as “the actions, materials and artifacts we use for communicative purposes” (Van Leeuwen, 2005, p. 285). I adopt this definition in this study. Thus, not only verbal and nonverbal behaviors but also tools
such as a pen, a computer, a map, and a whiteboard are considered as potential semiotic resources.

Alignment

Alignment, which is a key notion in the sociocognitive perspective, is defined by Atkinson et al. (2007) as “the complex processes through which human beings effect coordinated interaction, both with other human beings and (usually human-engineered) environments, situations, tools, and affordances” (p. 169). For example, as shown in Atkinson et al. (2007), a tutor helped her student learn a new grammar form by assisting her align with the form. This process of alignment was realized through multiple modes such as eye gaze, bodily orientation, gesture, and spoken and written language. In other words, by examining alignment, the dynamics of a learning process can be investigated (Atkinson et al., 2007). In this study, following the sociocognitive approach, I adopt Atkinson et al.’s above definition of alignment.

The Audience for the Study

This study is mainly intended for three groups of readers. First, it is hoped that the study provides empirical data of student discourse for CLIL researchers and educators. As pointed out earlier, despite the growing body of research in CLIL classrooms, studies that examine student discourse are insufficient. The data presented in the current study will help CLIL researchers better understand the nature of CLIL student discourse and its development over time. Moreover, because it is often difficult for teachers to know how students work in group work settings, the data
presented in the study will help CLIL educators gain insights about learner activities and language.

Second, the data and findings of the study can be useful for SLA researchers who are interested in the multimodal aspect of L2 communication and learning. As noted above, multimodal discourse is now receiving increased attention in SLA research (Negueruela & Lantolf, 2008). In the current study, I document how learners use their L2 and other semiotic resources such as gesture, embodied action and analyze the role of multimodal resources in the development of L2 academic discourse. Thus, this study offers insights about the roles of multimodality in the development of L2.

Third, it is hoped that the current study presents CLIL as a pedagogical option to those who are involved in curriculum development at tertiary education in Japan. In the near future, there might come a time when students come to university classes with prior experience with EMI as MEXT promotes now in high school. When this happens, those who are involved in tertiary education should be ready to offer curricula that will further develop such students’ abilities. Thus, student discourse data, which shows the impact of CLIL in the Japanese context, will be useful for curriculum developers to consider the potential of CLIL in Japanese future tertiary education.

**Delimitations**

I employ a case study approach in this study (Merriam, 1998; Stake, 2005; Yin, 2014). It should be noted that generalization of findings from case study research takes a different form from that in positivist research (Simons, 2009). In positivist research,
findings of a study are validated when it meets an assumption that a phenomenon is typical of a population. On the other hand, in case study research, findings from a case are validated by maintaining its “connectedness with the particulars of the concrete case in context” (Simons, 2009, p. 164). Simons pointed out that the context-dependent knowledge gained in a case study can be transferred by readers who find the context of the study relevant to their context. Thus, although this study is bounded to the specific interaction in and concerning the sociolinguistics course being observed, the findings that are derived from this particular context have the potential to be transferred and applied to other CLIL classrooms.

In this study, a focus is placed on academic discourse in one CLIL course at a university in Japan, and more specifically on one aspect of academic discourse, explaining. Furthermore, this study is focused on three groups of students within the CLIL class in order to provide a thick description of the process in which the students engage with disciplinary knowledge by participating in various academic tasks such as listening to lectures, writing a research proposal, giving an oral presentation, and writing a research report. The focus on these particulars allows for a descriptive and analytical depth that cannot be attained by casting the methodological net more broadly. In addition, students in the CLIL course have a certain level of English as measured by Test of English for International Communication (TOEIC), speak Japanese as their L1, and share cultural backgrounds as Japanese. Therefore, these factors and other specifics of this case need to be taken into careful consideration when transferring the findings from this study.
**The Organization of the Study**

There are eight chapters in this study. In this chapter, I have presented the background of the study, limitations in current CLIL research, the purposes of this study and the conceptual framework. Following these sections, definitions of key terms—CLIL, academic discourse, explanations, multimodality, semiotic resources, and alignment—were provided. At the end of Chapter 1, I explained the audience and delimitations of this study.

Chapter 2 is a review of the relevant literature that serves as the basis of this study. Three areas reviewed are: the literature on classroom discourse in CLIL, explanations, and multimodality. At the end of Chapter 2, the conceptual framework of the study and research questions are presented. In Chapter 3, Approach and Methods, I explain the approach of this study and the research context such as the school and the target CLIL course, participants, and procedures of data collection and analyses followed by a discussion of my positionality in this study. Findings are presented in Chapters 4, 5, and 6. In Chapter 4, I report the analyses of instructional discourse of the sociolinguistics course, that is, textbook and teacher explanations of disciplinary knowledge. In Chapter 5, analyses of student discourse in group work are reported. In Chapter 6, I examine student discourse in oral presentations and written reports. The main results are discussed in Chapter 7. In Chapter 8, I present a summary of this study, theoretical and pedagogical implications of the study, limitations, suggestions for future research, and a conclusion.
CHAPTER 2

REVIEW OF THE LITERATURE AND CONCEPTUAL FRAMEWORK

The present study has been informed by three areas of research: studies on classroom discourse in CLIL, explanations, and multimodality in academic discourse. I begin by reviewing discourse studies on CLIL classes, and then turn to research on explanations. Because research has pointed out that explanations in classrooms are interactively accomplished through multimodal means, my review of the literature next examines the role of multimodality in academic discourse. In my reading of the literature, I have concluded that a conceptual framework that is sensitive to the multimodal nature of discourse, and in particular the nature of discourse in SLA, should be brought to the analysis of explanations in CLIL learning. Toward the end of this chapter, I argue that the conceptual framework that best addresses the multimodal nature of discourse in CLIL learning is the sociocognitive approach to SLA (Atkinson, 2002, 2010, 2011). Drawing on this framework, I present my research questions.

Research on CLIL Classroom Discourse

As explained in the previous chapter, research on CLIL has been increasing in recent years. Especially in Europe, research on CLIL classroom discourse has provided valuable data about how content knowledge is taught in L2 in CLIL settings. Discursive features of CLIL classes that emerge from the literature are: (a) classroom discourse in CLIL is dialogic between the teacher and students (Dalton-Puffer, 2007;
Nikula, 2010), and (b) the discourse is structured differently across subjects (Llinares et al., 2012). In what follows, I elaborate on these discursive features.

**Dialogic Teaching**

Research indicates that the discourse in CLIL classes is highly dialogic between the teacher and students. Frequent teacher-student verbal interactions have been a salient feature in the data. Dalton-Puffer (2007) investigated patterns in language use and forms that are characteristic of CLIL lessons. In this study, Dalton-Puffer analyzed audio-recordings of 40 CLIL lessons that were collected at ten schools in Austria (Grades 5-13). The result showed that extended teacher monologue was absent from the data. Instead, teachers frequently asked questions and encouraged students’ participation in the classroom discourse. Although students’ responses were often short, the frequent verbal exchanges indicated that students were not passive recipients of knowledge but played a role in the construction of classroom discourse and knowledge.

The emphasis on dialogic teaching was also witnessed in a case study of a CLIL teacher. Nikula (2010) investigated how CLIL might influence a teacher’s pedagogical practice. The participant was a Finnish biology teacher who taught CLIL lessons in English and non-CLIL lessons in Finnish. Nikula collected video recordings of the teacher’s lessons and interviewed him. Informed by a discourse-pragmatic approach (Hall & Verplaetse, 2000) and sociocultural theory (Lantolf & Thorne, 2006), she analyzed the biology teacher’s interactional and instructional styles in class. The results showed that the teacher’s interactional style was more dialogic in CLIL lessons
than in non-CLIL lessons. Nikula explained the difference in the teacher’s interactional patterns using the notion of socialization. According to Nikula, in non-CLIL lessons, the students had already been socialized into the classroom practice where the role of students is that of “passive receivers” of knowledge. On the other hand, it is likely that the teacher’s role and the students’ role were not so established in CLIL lessons. Therefore, the interactional pattern was more “give-and-take” in CLIL lessons than in non-CLIL lessons (p. 114).

Llinares and Whittaker’s (2010) comparative study of CLIL and L1 classes offers valuable insights into how dialogic teaching affects students’ L2 use and content learning in CLIL settings. The study was conducted at two secondary schools in Madrid. Llinares and Whittaker collected students’ spoken utterances and written compositions in two CLIL history classes and two L1 history classes at these schools. The CLIL and L1 history classes followed the same syllabus. By using a Systemic Functional approach (Halliday & Matthiessen, 2004), the researchers compared the language produced by CLIL and L1 students. As a result, it became clear that one of the differences between the two groups was the frequency and variety of modality (e.g., the use of modal verbs such as can and have to). Modality is an important linguistic resource in academic discourse because it is “necessary to develop argumentation, hypothesis-testing and other academic functions” (Llinares & Whittaker, 2010, p. 130). It was observed that CLIL students used expressions of modality more frequently and a wider variety of modals. As seen in the examples presented below, CLIL students used expressions of obligation (Sentence 1), ability

```
(Sentence 2), usuality (Sentence 3), and probability (Sentence 4). On the other hand, L1 students’ use of modality was limited to the expression of obligation (Sentence 5).

1. They **had to work** very hard for money and they **had to pay** to the church
   (CLIL student, obligation)

2. Nowadays we have more rights than then, we **can** choose where we want to work. (CLIL student, ability)

3. The Church had a lot of political, economical, and cultural & **obviously** religious power. (CLIL student, usuality)

4. The houses were small **normally** [sic] of one room and a shed. (CLIL student, probability)

5. The peasant **had to** pay the lord a part of his harvest. (L1 student, obligation) (Llinares & Whittaker, 2010, p. 138)

Llinares and Whittaker attributed CLIL students’ more frequent and more varied use of modality to the way CLIL classes were taught. According to the researchers, the spoken data indicated that “[t]he CLIL teachers open[ed] up the discussion to a variety of points of view and relate[d] the historical content to the students’ personal experience and views more than the L1 teachers” (p. 138). They claimed that the CLIL context provided learners with “more space for interaction.” As a result, students in CLIL classes could “learn content in different ways as they do not only display accepted knowledge but they also discuss it from a number of points of view, and relate it to their own experience” (p. 141).
This line of research suggests that CLIL classes tend to create more space for interaction between the teacher and students than L1 classes. In addition, in CLIL classes, students are given room for discussion of various viewpoints, which, in turn, brings about the students’ use of more varied linguistic resources to express modality. It should be noted, however, that most of the data used in these studies was collected in teacher-led discussions, with the exception of the students’ written data collected by Llinares and Whittaker (2010). In teacher-led activities, students’ utterances tend to remain short. Thus, these studies did not shed light on how, or if, students generate extended explanations about their knowledge in the target subject and how students’ explanations might develop as they participate in various pedagogical tasks in class.

**The Impact of Genre on Discourse**

CLIL classroom research also indicates that the structure of discourse varies depending on the subject of lessons. In their corpus research of CLIL classroom data from Spain, Austria, Finland, and the Netherlands, Llinares et al. (2012) examined texts used or produced by teachers and students in three genres: science, geography, and history. Their analyses indicated that the way in which knowledge was structured varied across the genres and within each genre. For example, science explanations were structured as follows: (a) *the definition* of a phenomenon, (b) *an explanation*, and (c) *an extension* in which an effect of the phenomenon might be addressed. According to Llinares et al. (2012) the explanation in science can be organized in phases, which are related with each other temporally or causally. In history, different genres of texts were identified within the subject, including chronologically structured narration,
explanation of causes and consequences, and the argument of different interpretations of history. For instance, whereas historical accounts—a genre most frequently associated with a history text—were structured by time or through causal relations, historical explanations were structured logically by causes and consequences. As Lliinares et al. (2012) argued, “[l]anguage is not simply a means of transport for ideas, carrying the knowledge of a subject, but, in fact, it constructs, structures and even restricts knowledge through discipline-specific texts” (p. 111). Therefore, in order to succeed in CLIL classes, students need to develop the ability to understand and participate in discipline-specific discourses (Lliinares et al., 2012).

In addition to the genre of subjects, types of activities impact how knowledge is explained in the classroom. In the next section, I first discuss how explaining is operationalized in previous research. Then I review studies that examined the impact of activity types on student-generated explanations.

**Explaining in the Classroom**

Explanation has been researched widely from various approaches. In science education, there are researchers who investigated effects of *self-explanation* on learning from a cognitive perspective (e.g., Chi, Bassok, Lewis, Reimann, & Glaser, 1989; Chi, de Leeuw, Chiu, & LaVancher, 1994; Chi & VanLehn, 1991). There are also researchers interested in explanation as a social, communicative event. The interactional approach taken by these researchers has shed light on how explanations are co-constructed among a teacher and students in class. These studies can be found in L2 education (e.g., Dalton-Puffer, 2007; Lliinares & Morton, 2010) and
science/math education (e.g., Forman & Larreamendy-Joerns, 1998; Woodruff & Meyer, 1997). In what follows, I review research on explanations that were conducted from a cognitive approach and an interactional approach.

Explanations have long been studied from a cognitive perspective in science education (e.g., Chi et al., 1989; Chi et al., 1994; Chi & VanLehn, 1991; Coleman, 1998). Researchers taking the cognitive approach to explanations have used largely experimental designs to investigate how student learning is affected when they explain to themselves the content that they are learning (self-explanations). For example, Chi et al. (1989) studied the relationship between the production of self-explanations and students’ understanding of scientific concepts by using think-aloud protocols. They collected data from ten college students as they learned three worked-out examples of physics problems through self-explanations. The analysis of transcribed data showed that the students who generated more self-explanations scored better on a posttest than those who generated fewer self-explanations.

Chi et al. (1994) conducted a quasi-experimental study in which an experimental group was given prompts for explaining to themselves a biology text that they were studying, and a control group was asked to read the text twice. The results indicated that the prompted group had a greater gain from a pretest to a posttest than the unprompted group. The authors also looked at how self-explanations were constructed. The data showed that the participants constructed self-explanations by integrating new knowledge with various types of information such as what was written in prior sentences of the text, the students’ background knowledge, their episodic experiences, and logical inferences. These results led the researchers to consider that
self-explanations are a “constructive activity” and that “learning is the use of existing knowledge in conjunction with new information to create more new knowledge” (Chi et al., 1994, p. 470).

Whereas the above self-explanation research was focused on the cognitive activities of individual learners, there are researchers in science education who have investigated the interactional aspect of explanation. For example, Forman and Larreamendy-Joerns (1998) claimed that:

Explanations emerge in the context of conversational exchanges and consequently are oriented toward and modulated by an audience. The audience, or more generally the context in which an explanation is given, determines how explanations are organized and what features they should possess to count as acceptable. (p. 106)

In their comparative investigation of everyday explanations and explanations in a math class, Forman and Larreamendy-Joerns identified how the context affected the production of explanations. Because everyday explanations in casual conversations tend to occur between familiar people who share a common history, they do not need to exchange a large amount of information and thus become highly condensed, formulated with minimal amounts of language and a high frequency of deictic terms. On the other hand, in science discourse including science classrooms, extensive and explicit explanations are expected. Therefore, an important role for teachers is to serve “as mediators between two communities: the everyday world of interpersonal communication … and the world of the mathematic register, in which the students are legitimate peripheral participants” (Foreman & Larreamendy-Joerns, 1998, p. 112).
their analysis of classroom discourse, the teacher was observed helping the students appropriate the mathematic register by requesting more explicit explanations and by substituting pronouns and deictic expressions in students’ utterances with more specific terms.

CLIL researchers have studied how explanations are discursively organized and constructed in CLIL classes from an interactional approach (Dalton-Puffer, 2007; Llinares & Morton, 2010). These researchers adopt the stance that “[e]xplanation is an interactive contextual reconstruction” (Baker, 2009, p. 145). In this perspective, explanations arise in the course of interaction and are realized as “processes underlying extended sequences” (Baker, 2009, p. 145). These CLIL researchers have also drawn on ideas presented by Gaulmyn (1986) in the field of developmental psychology. In her experimental study, Gaulmyn identified three elements in the organization of explanation: the object to be explained (O, explanandum), the explicator (S1), and the addressee (S2). These three elements form a triadic relation where they interact with each other (Figure 1) and thus are very similar to Hilton’s (1990) definition of explanation presented in the previous chapter. In addition, Gaulmyn showed that explaining is different from defining, which serves a similar academic language function. Whereas definitions are oriented inward towards a definiendum, explanations are oriented outward towards an addressee (Figure 2). In an explanation, the same object needs to be acknowledged as an explanandum by the explicator and the addressee. Then, the explicator needs to adapt an explanation for the addressee. The outward orientation is an important feature of explanations because it
explains why explanations change in context. Explanations are not decontextualized but are co-constructed by the explicator and the addressee.

Gaulmyn (1986) also identified three discursive moves in the construction of explanations:

1. Identification of the object (explanandum) and distribution of roles of an explicator and an addressee,
2. A recursive explaining text which orients towards the addressee, and
3. Sanctioning the explanation.
The above discursive moves were observed in CLIL classroom data provided by Dalton-Puffer (2007), whose research was reviewed above. For example, a teacher initiated an oral explanation sequence by explicitly marking the explanandum (e.g., “a diarrhea, this is …,” “early adopters they tend to …”). Then, the teacher explained the explanandum through strategies such as giving examples and offering translation equivalents of a target concept. Finally, the teacher often completed an explanation by checking students’ comprehension (e.g., “Do you understand?,” “Any questions?”). In the case that an explanation was elicited from a student, the teacher might sanction the student’s contribution by giving evaluative feedback. Although it is acknowledged that not all explanation sequences follow the three-phase process (Llinares & Morton, 2010), Gaulmyn’s framework (1986) has proven to be highly informative in CLIL research on explaining (Dalton-Puffer, 2007; Llinares & Morton, 2010).

Llinares and Morton (2010) analyzed explanations in the CLIL context using Gaulmyn’s (1986) framework and a Systemic Functional approach (Halliday & Matthiessen, 2004). Considering explanations as a situated practice (Lave & Wenger, 1991; Wenger, 1998; Young, 2009), Llinares and Morton used Goffman’s (1981) concept of participation frameworks in their interpretation. The participants of the study were 13- to 14-year-old CLIL students from secondary history classes in Spain. In order to investigate the interaction between the patterns of participation and students’ construction of explanations, Llinares and Morton collected student explanations produced in two different discursive contexts: classroom discussions and individual interviews. The same prompts concerning a topic covered in class were used in both contexts. The classroom discussions were led by teachers, and the
individual interviews were led by a researcher. The collected data were analyzed quantitatively and qualitatively. The results showed that the construction of student explanations was different quantitatively and qualitatively between the two discursive contexts. The quantitative analysis indicated that among 77 student explanations identified in the data, 15 were produced in classroom discussions and 62 in individual interviews. In addition, explanation sequences were much more distributed among participants in classroom discussions, whereas students produced longer explanations in individual interviews. Moreover, students used a wider variety of lexicogrammatical features in explanations during interviews.

In the qualitative analysis, Llinares and Morton considered what accounted for the quantitative differences by interpreting them within participation frameworks (Goffman, 1981). For example, in the quantitative analysis, it was found that cognitive discourse markers such as *I think* and *I don’t know* were used more frequently in the student explanations during the interviews. Llinares and Morton pointed out that the frequent use of cognitive markers indicates a shift in the students’ stance, referred to as *footing* (Goffman, 1981), from a speaker of someone else’s words to a speaker who is responsible for the opinion that is expressed.

Llinares and Morton’s (2010) findings are very important to this study. First, they add confirming evidence to the previous observation that the activity structure of teacher-led discussion is unlikely to afford the production of students’ extended explanations. Second, the findings provide evidence that different discursive contexts afford the linguistic realization of students’ agency to different degrees. Whereas the structure of teacher-led activities typically allows for short turns by students and
encourages them to be a co-author of collaboratively constructed explanations, the structure of interviews encourages them to act as a speaker who is responsible for their opinion. As a result, students tend to exhibit increased agency in interviews.

Outside CLIL research, it has been observed that the way disciplinary knowledge is explained is essentially different between teacher explanations and those in a textbook. By referring to research findings in Goodwin (2007a) and Ochs (1986), Young (2009) pointed out that by using embodied explanations, the teacher incorporates students into the explanations as *subjective participants*. On the other hand, in textbook explanations, lexicogrammatical features such as passives, nominalization, and technical vocabulary are frequently used, which discursively places students in a position of distant *objective observers*.

The impact of the context on the way explanations are produced was also studied by Woodruff and Meyer (1997). By analyzing discursive data of students’ explanations about scientific concepts collected in three separate studies, Woodruff and Meyer studied students’ knowledge construction in two discursive contexts: small group discussions (intra-group) and whole class discussions (inter-group). As a result, they identified a pattern in students’ explanations in the two discursive contexts. They stated, “[w]e noticed that the small group discourse was conducive to generating explanations, while the inter-group discussions challenged the acceptability of the ideas students generated” (Woodruff & Meyer, 1997, p. 30). More specifically, in small group (intra-group) discussions, there were “numerous instances of students reiterating and building on each other’s ideas” (p. 30). On the other hand, in whole class (inter-group) discussions, there was “a high demand for clarity and explanatory
power” (p. 30). Their study showed that “students modify their behavior and discourse based on the type of community” (p. 30) that they participate in. In addition, it was observed that there were three stages in the development of student explanations. First, they were mostly about description of objects. Then, the students began to explain relations among variables. Students’ final explanations involved “a complex system” of the target concept and discussed coherence of various conditions and effects. The three stages in the development of the students’ explanations showed how their content knowledge transformed.

The above studies by Llinares and Morton (2010) and Woodruff and Meyer (1997) indicated the impact of discursive contexts on quantity and quality of student explanations. Whereas teacher-led discussion is unlikely to afford students’ extended explanations, small group discussion seems to allow students to reiterate and build on each other’s ideas, thus leading to more student-generated explanations. However, it should be pointed out that whereas research in science and math education suggested how student explanations might evolve across contexts (e.g., Woodruff & Meyer, 2010), the temporal aspect of explanations, that is, how explanations develop, has not been explored in CLIL research studies because cross-sectional data are used in these studies. As a result, we have insufficient knowledge about how CLIL students learn to explain disciplinary knowledge over time. To address this gap in the literature, I investigate the development of student explanations by collecting students’ spoken and written discourse produced in sequenced tasks of a course project.
Multimodality in Academic Discourse

Although explaining was previously presented as an academic language function in Chapter 1, research has shown that explaining is not merely a matter of language but a multimodal communicative event. In this section, I first present the multimodal approach to communication (Kress, 2001, 2010, 2011), and review studies in which multimodal discourse events in academic settings, including teacher explanations and student explanations, were investigated. I then discuss why the multimodal approach is useful to study students’ discourse practice in CLIL settings. Finally, I review SLA and CLIL research studies in which the multimodal aspect of language learning was examined, and follow with a discussion of how this study can contribute to SLA and CLIL research by adopting the multimodal perspective to teaching and learning.

A Social-Semiotic Approach to Multimodal Communication

A social-semiotic approach to multimodal communication, or a multimodal approach, gives attention to all modes, including talking, writing, image, gesture, color, and space (Kress, 2001, 2010, 2011). Originating in work by Halliday (1978, 1994), the scope of social semiotic theory is how meanings are made in social situations. Each source for making meaning, or a mode, is culturally shaped and is under constant negotiation. In this view, communication is always multimodal and language is not granted a privileged position. Meanings are communicated through the configuration of multiple semiotic resources (Kress et al., 2005).
Previous studies that took the multimodal approach have documented the interplay of multiple modalities in school discourse. For instance, Kress et al. (2001) examined teacher-student interactions in science classrooms of four secondary schools in London, England. Their research demonstrated how speech, writing, image, action, gesture, and models were combined in meaning-making activities of the science classroom. In the study, a teacher explained the movement of gas particles using arm gestures. Another teacher explained the circulation of blood by handling a model of the human body. Their study illuminated the multiplicity of semiotic modes used in science teachers’ explanations.

Jaipal (2010) investigated an experienced biology teacher’s use of multimodal resources in his explanation of chemosynthesis in a Grade 11 class. Informed by work by Kress et al. (2001) and Lemke (1998), Jaipal’s multimodal discourse analysis showed that the teacher used multiple modalities simultaneously and sequentially to introduce the target concept to his students. Jaipal stated that the teacher’s verbal discourse was “interspersed with a mixture of natural and disciplinary language … and gestures that helped to scaffold transformations between students’ everyday experience with oxidation and the scientific definition of oxidation in written and formula notation” (p. 66). As Jaipal acknowledged, his study complemented findings of other studies on teachers’ use of multiple modalities in science classroom (e.g., Kress et al., 2001; Lemke, 2002).

Although many researchers have examined science teachers’ explanations (e.g., Jaipal, 2010; Lemke, 2002; Márquez, Izquierdo, & Espinet, 2006; Prain & Waldrip, 2006), there are also investigations of how scholars generate explanations using
multimodal resources. The multimodal discourse analysis by Querol-Julián and Fortanet-Gómez (2012) is one such study. The context of the research is a discussion session that follows a paper presentation at an academic conference. Informed by multimodal discourse analysis (Kress & Van Leeuwen, 2001), appraisal theory (Martin & White, 2005) and systemic functional linguistics, the researchers analyzed the joint use of spoken language and non-linguistic resources to investigate how evaluative meaning was expressed by two speakers, a female presenter and a male discussant. The following is a list of categories used for the analysis:

- Linguistic (semantic) resources—attitude, engagement, graduation (Martin & White, 2005)
- Paralanguage—loudness, syllabic duration, laughter
- Kinesics—gestures, facial expression, gaze, head movement

According to the multimodal analysis by Querol-Julián and Fortanet-Gómez, the two speakers used linguistic resources and non-linguistic resources together when they spoke and listened. For example, the female speaker nodded her head when using a verbal expression of positive attitude. The researchers believed that the kinesthetic expression intensified the verbal expression. In another case, the female speaker moved her head forward when she appeared to mitigate her authorial voice by using a modal might. The researchers considered that the forward head movement intensified her verbal mitigation. These examples are illustrative and concrete: non-linguistic resources can be used to intensify verbal expressions and, in some cases, to express new attitudinal meaning (Querol-Julián & Fortanet-Gómez, 2012).
The above studies of the non-linguistic aspect of academic interaction indicate that explanations were constructed by the teachers and scholar with multimodal semiotic resources. The content experts skillfully manipulate the resources to convey complex meaning in academic discourse. However, it should be pointed out that these studies do not show how people learn to explain target concepts. Insights about the process of learning to explain disciplinary knowledge are important because this is precisely what students are expected to do in school: Students come to the first class as a novice and are expected to leave the last class with increased disciplinary knowledge. While they are in class, they need to learn to explain new knowledge.

There are a few studies in which the development of students’ content knowledge and their explanations were examined. Tang, Tan, and Yeo (2011) investigated how five 9th graders constructed physics knowledge in their group discussion. The findings showed that spoken language, written text, mathematic symbols, and gestures were all part of their meaning-making activities. It was also observed that a student participant, Jack, made good progress in his understanding of a target concept by integrating meanings that were represented in spoken, written, symbolic (mathematic), and gestural modes. This result indicates that students’ learning is mediated not only by language but also by multiple modalities.

An experimental study by Goldin-Meadow, Nusbaum, Kelly, and Wagner (2001) suggested the contribution of gesturing to cognitive activities while people produce explanations. In a study on the impact of gesturing on cognitive load, the researchers investigated how children and adults performed math tasks in two conditions—a condition in which they could use gestures and a condition in which
they could not. In both conditions, the participants were asked to recall words or letters that they had been given after they explained how they solved the math problem. The results showed that the participants remembered the words and letters better when they could use gestures than when they could not. The researchers argued that the use of gesture might have reduced the speakers’ cognitive load. The finding by Goldin-Meadow et al. (2001) has an important implication for this study because it gave supporting evidence to a claim that using gesture helps people regulate their thinking.

In a study on the early stages of the development of students’ content knowledge, Roth and Lawless (2002) investigated the emergence of students’ theoretical language and abstract concepts. They studied video-recordings collected in Australia, Canada, and Germany over 10 years and analyzed students’ meaning-making activities in which they were asked to provide observational or theoretical descriptions of a target scientific phenomenon. The students used iconic and metaphoric gestures frequently at the beginning; however, when the students became competent and had previously articulated their ideas in writing, gestures were replaced by the verbal mode. Having noticed temporal delays between gestural and verbal means in students’ discourse, Roth and Lawless reached the following interpretation: In conversations in which material objects or events are present, they provide “a perceptual ground against which students can enact metaphorical gestures that embody (give a body to) entities that are conceptual and abstract” (p. 288). The gestures, in turn, become a basis for subsequent “representational work so that new competencies can develop in the verbal modality” (p. 300).
The report by Roth and Lawless (2002) is very insightful because it shows the contribution of perceptual and gestural modes to the emergence of verbal representations. Goodwin (2013) argued that a contextual configuration of physical representations frames and constitutes actions by participants in the setting, and, at the same time, is also constantly reshaped as new representations are added and existing ones are disregarded. Roth and Lawless’s finding about metaphorical gestures might exemplify Goodwin’s argument. That is, the students manipulated the physical representations around them by using metaphorical gestures, which created a new contextual configuration for subsequent verbal representations.

In sum, the studies reviewed in this section point to the importance of the multimodal approach: It can reveal the complex semiotic structure of academic discourse. Moreover, the multimodal approach might also lead to a better understanding of the process in which abstract language emerges through scaffolding by gestures and embodied action as suggested by Roth and Lawless (2002). Therefore, by incorporating the multimodal perspective into the analysis, I aim to investigate the development of students’ disciplinary knowledge and academic discourse skills in this study. In the next section, I review studies in which the multimodal aspect of CLIL classroom discourse was investigated.

**Multimodality in CLIL Research**

A few researchers have investigated multimodality in CLIL classroom discourse. Escobar Urmeneta and Evnitskaya (2014) analyzed how semiotic resources were used in teacher-student interaction during a CLIL biology class at a secondary
school in Spain. As a result of their multimodal conversation analysis (CA) of video-recorded classroom interaction, they found that the teacher utilized multiple semiotic resources when a comprehension problem was displayed by students. In response to the problem, the teacher reformulated abstract scientific terms to everyday discourse in L2, provided L1 translation, and used pointing gestures and gaze in order to facilitate students’ understanding of a target concept.

In a study on student explanations, Kupetz (2011) examined how Lucas, a 10th grade male student, explained the mechanism of ocean tides in a CLIL biology class in Germany. As discussed above, there is a paucity of data on student discourse in current CLIL research, and thus Kupetz’s analysis of student explanations is important. Informed by interactional linguistics, CA, and multimodal analysis, her study revealed that Lucas used facial expressions, gesture, and pauses in addition to his speech in order to explain the target concept. It was also observed that Lucas used these semiotic resources to seek assistance from the teacher and peers. These multimodal resources, in return, enabled Lucas to produce an extended explanation, which was co-constructed with people around him.

The studies by Escobar Urmeneta and Evnitskaya (2014) and Kupetz (2011) point to the crucial role of multimodality in CLIL discourse. Based on a claim that one of the sources for obstacles in classroom discourse is dense content (Gajo, 2007), Escobar Urmeneta and Evnitskaya argued that “the denser the discourse is, the more mediation is required” (p. 167). As stated in the previous chapter, students need to understand dense content and abstract academic language in school. In CLIL, where the instructional language is not students’ L1, the challenge is even greater for the
students. Thus, it appears natural that both teachers and students turn to multimodal semiotic resources to mediate dense content addressed in academic discourse. The present study builds on the work by Escobar Urmeneta and Evnitskaya (2014) and Kupetz (2011) by investigating student explanations in a university-level CLIL course. Because the analysis is focused on how students use multimodal semiotic resources to construct explanations in various discursive contexts (e.g., group discussion, oral explanation), this study can contribute to CLIL research that has primarily concerned discourse in teacher-led discussions.

**Multimodality in SLA Research**

Although multimodality was never a major focus in early research in SLA, there is an increased interest in the roles of multimodal resources in language learning among SLA researchers (Early, Kendrick, & Potts, 2015; Negueruela & Lantolf, 2008). First, there are CA studies that examined multimodality in L2 teaching and learning contexts. Lazaraton (2004) investigated gestures used by an ESL teacher in explanations of vocabulary using McNeill’s (1992) classification system of gesture. Video-recordings of three 50-minute grammar lessons taught by the teacher were analyzed. The result indicated that among eighteen cases of verbal explanations of vocabulary, twelve explanations were accompanied by gestures. For example, the teacher used kinetographic gestures—a type of iconic gesture that represents bodily action—to explain meanings of *mislaid* and *feed*. She also used pictographic gestures—another type of iconic gesture that represents the actual form of an object—to visually represent *a broom* in an explanation of a verb *sweep*. In a study on the coordination of
speech and gesture, Belhiah (2013) examined how an American ESL teacher used gesture in her spoken definitions as she explained vocabulary to a Korean graduate student in tutoring sessions. Belhiah’s CA on three one-hour sessions indicated three roles of gesture: 1) to reinforce the meaning of verbal utterances, 2) to clarify the meaning of lexical items, and 3) to establish cohesion across turns at talk. Lazaraton (2004) and Belhiah (2013) commonly claimed that the gestures were not triggered by a communication failure or a gap in the teacher’s pedagogical competence, but were used by the teachers to amplify and give additional meaning to verbally expressed meaning in the explanations. The two researchers also argued that teachers’ gestures possibly provided comprehensible input to L2 learners.

In a CA on student-student interaction in L2, Olsher (2008) examined the role of gesturally-enhanced repeats—a repair turn which is repeated with gesture or other embodied action—in SLA. In the two examples of gesturally-enhanced repeats in the data, the learners used iconic gestures with repeated lexical items (e.g., a sweeping gesture for representing large). It was also observed by Olsher that the recipient of the gesturally-enhanced repeats attended to the input and accepted them as successful repair turns. This finding led Olsher to claim that gesturally-enhanced repeats, which represented the target meaning “in a multi-modal format” (p. 126), have a potential to promote learning. Gullberg (2006) also examined students’ use of gestures in a study on cohesiveness in L2 speakers’ discourse. The data were collected in story-retelling activities in which Dutch learners of French narrated cartoons under two conditions—a visible condition in which two interlocutors could see each other and an invisible condition in which a screen was put up to prevent the interlocutors from seeing each
other. Gullberg’s CA indicated that: (a) the L2 speakers produced overexplicit discourse by the overuse of lexical nominal expressions and anaphoric gestures, gestures to refer back to an earlier word, for spatially anchoring referents, and (b) the L2 speakers probably used the anaphoric gestures as a communication strategy for disambiguating intended meaning.

In a study on interaction at a student-initiated conversation table, Mori and Hayashi (2006) investigated how L1 and L2 speakers of Japanese coordinated talk and embodied action to achieve intersubjectivity. The focus of their study was embodied completion—the use of gestures to complete an utterance that was verbally left unfinished. The findings of their CA on two cases of embodied completion showed that the L1 speakers’ use of gestures helped to achieve mutual understanding with the L2 speakers, and the embodied completion created opportunities for a L2 speaker to learn “a more sophisticated linguistic expression” from a L1 speaker (p. 195).

Second, researchers taking a sociocultural perspective have investigated self-regulatory functions of gesture. For example, Platt and Brooks (2008) examined how two pairs of novice learners of Swahili used embodied means to solve problem-solving tasks. It was observed that the participants used their hands, gaze, and body orientation to establish intersubjectivity in their goals and procedures of the tasks. Based on the findings, Platt and Brooks claimed that as the participants used these embodied means, they also “became gradually more self-regulated, internalizing the routines and increasingly coming to use the language with few meditational means” (p. 71). McCafferty (2008) examined the use of metaphoric gestures and verbal metaphors by an adult Japanese female speaker of English, who immigrated to North
America, during a discussion session. His analysis showed that the participant was able to “render multiple layers of metaphor through gesture,” which she could not produce verbally (p. 63). The observed lack of co-expressiveness led the researcher to consider that gesture had become a separate means for meaning making for the participant and also functioned as tools for thinking and communicating, which, in turn, helped her appropriate and internalize the conceptions that she described.

Third, researchers who employ the sociocognitive approach to SLA have studied the role of multimodal resources in L2 learning (Atkinson, 2011; Atkinson et al., 2007; Churchill et al., 2010). In this approach, human cognition does not exist in isolation but is continuous with the world. Sociocognitive SLA researchers consider learning to be a process of adaptation to the world (Atkinson, 2011), and they investigate how learners adapt to, or align with each other and the environment through eye gaze, facial expressions, gesture, head and body movement, and tools. Atkinson et al. (2007) studied how a tutor (Tomo) and a 14-year-old tutee (Ako) aligned with each other and with their environment in a tutoring session of English grammar. More specifically, using the multimodal interaction analysis (Atkinson, 2011) informed by CA (Markee & Kasper, 2004; Ochs, Schegloff, & Thompson, 1996) and work on embodied action (Goodwin, 2000), the researchers analyzed the video-recorded data of the tutoring session from a sociocognitive perspective. It was observed that Tomo, an experienced English teacher who acted as a tutor in the tutoring session, coordinated her action with Ako through her non-linguistic verbal action (e.g., “latching” her turn onto Ako’s turn, using the same intonation pattern as Ako) and body orientation as she helped Ako to solve grammar questions on a
worksheet. According to the researchers, this coordinated interaction (alignment) is “a crucial aspect of second language acquisition” (p. 170) because it is how people adapt to the environment and engage in developmental activity.

Churchill et al. (2010) extended the above research and investigated how Tomo used gestures to guide Ako’s attention as she worked on the grammar exercises. As a result, a crucial point in grammar, which is ostensibly an invisible system, was made publicly “visible” for Ako to act on. The researchers explained the significance of Tomo’s gesture as follows.

By using gesture in concert with the worksheet, a linguistic routine, multimodal semiotic devices such as eye gaze, intonation, and body movement, and the sociocognitive learning resources provided by both the natural machinery of interaction and the socially constructed participation framework of the tutoring event, Tomo dynamically engaged and facilitated Ako’s learning processes by extending her cognition into the sociomaterial environment. (p. 250)

These two studies by Atkinson and his colleagues illustrated the potential contribution of multimodal semiotic resources in L2 learning. This finding is similar to those of the multimodal approach (e.g., Jaipal, 2010; Kress et al., 2001) in that both approaches revealed that learning is not only a matter of verbal activities but is supported by non-verbal modes. The sociocognitive SLA researchers provided empirical data on the workings of multimodal activities in L2 learning contexts and showed how such multimodal activities could result in L2 learning. However, it should be also pointed out that, as Atkinson and his colleagues acknowledged, their analysis was about a
tutoring session, not the kind of learning context that is usually studied in mainstream SLA research. In this study, I aim to contribute to the growing SLA research that examines language education through a multimodal lens by adopting the sociocognitive approach (Atkinson, 2002, 2010, 2011). More specifically, I investigate how students’ repertoires of participation in academic discourse develop during a CLIL course by analyzing their interaction with the teacher, peers, tools, and the environment.

The literature reviewed above indicated that discourse in CLIL classes is interactive and that explanations of knowledge are structured differently across disciplines. Although explanations can be examined in cognitive terms, researchers have found that an interactional perspective on academic explanations is more sensitive to the contextual nature of explanations and to the dynamics typically found in CLIL classes. Insofar as research to date has drawn on any conceptual framework, the focus has been on semiotics with a bias towards the examination of language, and less emphasis on the multimodal nature of embodied interaction. However, as indicated by the studies on multimodal interaction reviewed above, the sociocognitive approach to SLA is one promising framework that is being applied to multimodal discourse analysis. Because of this, and because this study concerns language learning, the area in which the sociocognitive approach is being applied, I have decided to adapt the sociocognitive approach (Atkinson, 2002, 2010, 2011) as my framework. In the next section, I describe fundamental tenets of the sociocognitive approach and discuss how this approach can be applied to multimodal discourse analyses in the present study.
Conceptual Framework: A Sociocognitive Approach to SLA

A fundamental tenet of the sociocognitive approach is that mind, body, and world work integratively in SLA (Atkinson, 2010, 2011). That is, these three are integral parts in SLA and cannot be separated from each other. In the sociocognitive approach, cognition is viewed as extended to and distributed in the world. This view of cognition contrasts sharply with a cognitivist approach in which cognition is regarded to exist internally within human mind, apart from the world. Another principle in the sociocognitive approach posits that learning is a process in which humans adapt to the world using tools and affordances around them. This view of learning is also different from cognitivist theories of learning, in which learning is regarded as an individual process of learning knowledge from the environment (Atkinson, 2010). A third principle in the sociocognitive approach claims that the process in which people adapt to the world, or alignment, is a major mechanism of SLA (Atkinson, 2010). For instance, in the study by Atkinson et al. (2007), as shown above, a tutee was observed to have successfully translated a sentence from L1 to L2 through multimodal alignment, which was scaffolded by a tutor using semiotic resources such as gesture, bodily orientation, and verbal confirmation.

In the sociocognitive approach to SLA, non-linguistic semiotic resources play crucial roles in SLA. As discussed above, people use non-linguistic resources such as gesture, bodily orientation, eye gaze, and kinesics to adapt to the environment. The focus on non-linguistic resources and extended cognition afforded by a sociocognitive approach to SLA is applicable to this study because in several instances the teacher used nonlinguistic resources when explaining disciplinary concepts. For instance,
when he explained how a vernacular language is perceived by people, he frequently used gestures to embody intangible disciplinary concepts (e.g., standard and vernacular varieties of language) making the abstract terms visually available to students in a shared sociocognitive space, and facilitating the students’ alignment to his explanations. In other words, the teacher used the embodied explanation to scaffold students’ alignment, similar to how the tutor used gestures to scaffold the tutee’s alignment in Atkinson et al. (2007) and Churchill et al. (2010).

In sum, a review of literature indicated that there is a paucity of studies that examined processes in which students generate explanations of disciplinary knowledge. The temporal aspect of the development of student explanations should receive more attention. Moreover, it was also indicated that in order to better understand the interactional aspect of explanations, more research needs to be conducted with an increased emphasis on multimodality of interaction. Therefore, in this study, informed by a sociocognitive approach to SLA, I aim to investigate situated and cumulative processes in which students learn to explain disciplinary knowledge.

**Gaps in the Literature**

The review on the previous research has shown the following gaps:

1. Few CLIL researchers have investigated student discourse outside of teacher-led discussions.
2. To the best of my knowledge, it has not been explored in CLIL discourse research how student explanations of disciplinary knowledge develop across contexts.
3. There are only a few studies that investigated multimodality in CLIL classroom
discourse.

4. Few researchers investigated multimodal interaction in L2 classrooms from a sociocognitive perspective.

**Purposes of the Study**

The main purpose of this study is to investigate processes in which students engage with disciplinary knowledge and discourse in a CLIL course. More specifically, I aim to study how student explanations of disciplinary knowledge might develop across time as they participate in a CLIL course. As noted above, this study is focused on student discourse practices in tertiary education because learning academic discourse skills at this level is considered to pose a great challenge on students. In order to analyze student discourse in context, I employ a case study approach (Merriam, 1998; Stake, 2005; Yin, 2014). Moreover, I draw on a sociocognitive approach to SLA (Atkinson, 2002, 2010, 2011) as a conceptual framework of this study because it equips me with a theory of learning and methods for multimodal discourse analyses to fill the gap in existing CLIL research.

**Research Questions**

In the present study, I pose the following research questions to address three issues described above:

1. How are explanations of disciplinary knowledge organized in a course textbook?
2. How are explanations of disciplinary knowledge by the teacher organized and presented?
3. How do students' explanations of disciplinary knowledge evolve as they work on a course project?

3a. During group work, how do students align explanations in the textbook, explanations given by the teacher, and other tools and affordances in their interaction with each other to form their explanations over time?

3b. In their oral presentations, how do students draw on tools and affordances to discursively organize their presentations and interactively align them with their audience?

3c. How do students align various tools and affordances in the process of writing explanations in their final reports, and how are these explanations discursively organized in their final products?

Research Questions 1 and 2 are posed for the purpose of investigating the discursive context of the CLIL course, where students’ learning takes place. First, I conduct discourse analysis on selected chapters in the course textbook (Research Question 1). I then conduct a multimodal discourse analysis on teacher explanations (Research Question 2). In this part of the analysis, I examine how the teacher coordinates multimodal semiotic resources in his explanations of disciplinary knowledge and how such teacher explanations might help students align to target disciplinary knowledge and discourse. Research Questions 3 and sub-questions (3a, 3b, and 3c) are posed to investigate situated and cumulative process in which students engage with disciplinary knowledge and discourse. First, I analyze how students align with each other, tools (e.g., the textbook, notes), and affordances (e.g., guidelines and oral and written
feedback given by the teacher) during group work (Research Questions 3a). The analysis is conducted repeatedly on a series of group discussions that students had throughout a course project. I then analyze how students use tools and affordances (e.g., slides, previous experience giving oral presentations) to construct extended explanations and to align with listeners (Research Question 3b). Moreover, I analyze how students align various tools and affordances (e.g., guidelines given by the teacher, previous experience with academic writing) to construct explanations in the final paper and how the explanations are discursively organized in the written mode (Research Question 3c). Answers to sub-questions 3a-3c enable me to illustrate students’ discourse practices during their project work. Finally, considering the discourse practices across settings and modes (Research Questions 3a-3c), I examine how students develop repertoires of participation in discourse practices and learn to explain disciplinary knowledge through a course project (Research Question 3).

In the next chapter, I present the research design and methodology of this study in detail. I then introduce the site of this research and present plans of data collection and analysis. I also discuss ethical considerations and my positionality in the study.
CHAPTER 3
APPROACH AND METHODS

In this chapter, I describe the approach of this study, the school where it was conducted, the English curriculum, the sociolinguistics research project, the participants, and ethical considerations given to the participants. I then explain how the data were collected and analyzed. These sections are followed by a discussion of my positionality.

Case Study Approach

In the present study, I employ a case study approach (Merriam, 1998; Stake, 2005; Yin, 2014). A case study is “an intensive, holistic description and analysis of a single entity, phenomenon, or social unit” (Merriam, 1998, p. 34). Case study research, in qualitative research, is well suited for an investigation of context and processes (Flyvbjerg, 2011; Merriam, 1998; Simons, 2009). More specifically, I use a single-case design (Yin, 2014), embedded with multiple groups. The case in this study is a CLIL course on sociolinguistics (See details about the course below). Within the sociolinguistics course, there are three groups of students who are the focus of analyses. The sociolinguistics course is regarded a case in this study because it is in this context, or a bounded system (Merriam, 1998) in which the students’ learning is situated. Data collected from the three groups of students are used for within-case and across-case analyses in order to gain an in-depth understanding of processes of students’ learning in the course.
The School and its English Curriculum

The present study was conducted at a private university in eastern Japan specializing in foreign language education. Students major in English or other foreign languages, and English curricula differ depending on which language students major in. English classes are taught by native-English speaking teachers, Japanese teachers of English, and bilingual/multilingual teachers of English. The school has a facility where students have access to materials for English learning such as graded readers, paperbacks, and movies. There are also group study rooms in this facility.

Students majoring in English take various English courses during their four years of study. In the first and second years, they have six English classes per week. These classes are conducted in English and provide many opportunities for learners to work in groups and give oral presentations. In their third and fourth years, students need to complete an additional five English courses. The English courses for juniors and seniors are content-based. The content of each of these courses is selected by the teacher, and students can choose the content that they would like to study. Every year, there are approximately 100 content-based English courses offered for third and fourth-year students majoring in English (e.g., intercultural communication, psychology, American society, music, film). The English curriculum for English majors is outlined in Table 1.
Table 1. An Outline of the English Curriculum for English Majors

<table>
<thead>
<tr>
<th>First-year students</th>
<th>Second-year students</th>
<th>Third and fourth-year students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman English (4) Media English (2)</td>
<td>Content-based English Courses (5 courses)</td>
<td></td>
</tr>
<tr>
<td>Reading &amp; Writing (2) Reading (2)</td>
<td>Writing (2)</td>
<td></td>
</tr>
<tr>
<td>Foundational English Skills (1)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. ( ) = credits.

The Sociolinguistics Course

Data collection for the present research was conducted in a content-based English course in the spring semester of 2015. This course was for third and fourth-year students majoring in English and the target content was sociolinguistics. The English course on sociolinguistics (referred to as the sociolinguistics course hereafter) was offered by a male Canadian instructor. He holds a PhD in language education, and sociolinguistics is an academic area he specializes in. The sociolinguistics course was developed for students of this university by the teacher based on his previous teaching experience in Canada. He taught the course in the fall semester of 2014, when I conducted a pilot study, and taught the same course again in the spring semester of 2015 (Details of the fall semester 2014 pilot study are provided below). Because the sociolinguistics course can be taken only once, the students who took the course in spring semester 2015 were different from those who took it in fall semester 2014.

The duration of the course was 15 weeks each semester and the class met twice a week for a total of 30 lessons. During the 15 weeks, the course covered a wide range of topics in the field of sociolinguistics such as language choice in multilingual communities, language maintenance and shift, gender, and age. The course syllabus the teacher designed for the spring semester of 2015 listed multiple goals associated
with both content and academic skill learning. Table 2 shows the goals as categorized into two groups, content and academic skills, by me (See Appendix A for a copy of the complete course syllabus).

<table>
<thead>
<tr>
<th>Content</th>
<th>Academic skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain in-depth knowledge on topics related to the study of language and society</td>
<td>Develop the ability to conduct, interpret, and report research both in oral and written forms</td>
</tr>
<tr>
<td>Identify and discuss both theoretical and practical issues in the field of sociolinguistics</td>
<td>Develop problem solving, critical thinking and cooperative work skills through readings and class discussions</td>
</tr>
<tr>
<td>Become familiar with some of the different techniques used to study sociolinguistics</td>
<td>Develop academic discourse/language in the subject area of sociolinguistics and applied linguistics</td>
</tr>
<tr>
<td>Develop the ability to analyze language samples to identify social markers</td>
<td></td>
</tr>
<tr>
<td>Develop a deeper knowledge of how all human activity is embedded in language practices which reflect and reinforce sociohistorical forces, constructs and identities</td>
<td></td>
</tr>
<tr>
<td>Develop and explore insights about one's own experiences with language use and language learning</td>
<td></td>
</tr>
</tbody>
</table>

It should be noted that the two areas, content and academic skills, are not mutually exclusive but they support each other. For example, I categorized the goal of “identify(ing) and discuss(ing) both theoretical and practical issues in the field of sociolinguistics” as a content goal because the object to be identified and discussed is sociolinguistic concepts. However, students need academic language skills to
participate in these activities. Similarly, I categorized the goal of “develop(ing) problem solving, critical thinking and cooperative work skills through readings and class discussions” as an academic skill goal because these skills are required in academic settings (Moore, 2011; Palincsar & Herrenkohl, 1999), but the development of these skills are mediated through readings and discussions about sociolinguistics. In CLIL, language learning is subject-specific and content learning requires genre-specific language use (Dalton-Puffer, Nikula, & Smit, 2010b). In this study, I aim to explore how content, L2, and academic skill learning interact with each other by investigating classroom discourse and the development of students’ academic discourse skills in the sociolinguistics course.

Students participated in various types of learning in the sociolinguistics course. There were reading assignments from a main textbook, and other books and articles. In class, there were reading quizzes given randomly throughout the semester. A midterm exam and a final exam were given in the semester.

There were also online tasks students needed to do outside class. According to the course syllabus, these online tasks are for encouraging students to reflect on their learning and share their ideas with classmates online. The reflection questions and students’ answers were posted on Edmodo, an online class management system. Students could also read each other’s comments and post their responses on Edmodo.
The Sociolinguistics Research Project

In addition to the above in-class and out-of-class tasks, students were required to complete a group research project on a topic in sociolinguistics. The students were expected to identify a research question, submit a research proposal, give an oral presentation, and submit a written report (See Table 3 for the schedule of key tasks in the project). The sociolinguistics research project is the focus of this study. Data were collected to examine students’ learning through their participation in the project. As explained below, various kinds of data were collected as students participated in tasks related to the project (e.g., the project proposal, the oral presentation, the written report). In addition, because one of the purposes of this study was to examine the situated process of students’ learning, data were also collected outside project work (e.g., observations of non-project lessons). I believe that because these non-project lessons shape the context of the project, collecting the contextual information was essential.

Table 3. Schedule of Key Tasks in the Sociolinguistics Research Project

<table>
<thead>
<tr>
<th>Week</th>
<th>Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Submit a research proposal (group)</td>
</tr>
<tr>
<td>13, 14</td>
<td>Give an oral presentation (group)</td>
</tr>
<tr>
<td>After week 15</td>
<td>Submit a written report (pair or individual)</td>
</tr>
</tbody>
</table>

Participants

The participants of the study were the students enrolled in the sociolinguistics course in the spring semester of 2015 and the teacher. In the spring semester of 2015, 25 students took the course. As discussed below, the students were informed of the
purposes of the study and data were collected only from the students who agreed to participate in the study (See Ethical Considerations for the detailed procedure). I also met a chair of the department that offered the sociolinguistics course and obtained permission to collect data in the course upon the students’ agreement.

Student participants were third and fourth-year students majoring in English. Their English skill was in a range of high intermediate to advanced levels. They were largely fluent in daily conversations such as greeting, giving self-introductions, and talking about topics such as hobbies and weekend activities. All of them had at least 600 points on the TOEIC because it was a course requirement. As outlined in the data collection section, information about the participants’ English proficiency and background in English learning was collected at the beginning of the semester.

In addition to the student participants, the teacher of the course participated in the study. As mentioned above, the instructor of the sociolinguistics course was a Canadian teacher. He had many years of experience as a language teacher in Canada and abroad. As noted above, he holds a PhD in language education and has actively worked in his specialized areas as a young scholar. He and I had initially met at a conference in North America in the summer of 2010. After I learned that a content-based English course would be taught by him at the site of this study, we exchanged a few e-mails in the late spring and summer of 2014. In the e-mail exchanges, I mentioned to him that I was looking for a site for my research and that I would like to visit his class. He approved my visit and a pilot study of his class in the fall of 2014. He also agreed to be a teacher participant in this study and to be interviewed during the data collection period.
Prior to his teaching at the site of this study, the teacher had taught the sociolinguistics course six times. The course was originally designed for Japanese university students studying in an exchange program at a North American university in 2002. The duration of the program was two semesters. When the teacher was offered to teach a content-based English course in the program, he chose sociolinguistics as target content. The course was taught in the first semester of the students’ study to initiate them to non-ESL content courses that they could take in the second semester. The sociolinguistics research project, which will be the focus of this study, was often included in the teacher’s content-based English course. According to him, his students worked on various interesting topics of sociolinguistics in the project. Since he first taught the course in 2002, he continued to teach it in the program until 2008.

The teacher modified the sociolinguistics course to teach it at the site of the study in the fall semester of 2014. He changed the order of topics according to a new textbook he chose while keeping some materials and tasks from his previous teaching of the course. The sociolinguistics research project was kept in the course. He said that it gave students a chance to work on a topic that is interesting to them. He also added online tasks to the course. The use of digital technology in education is one of his areas of specialty, so he incorporated technology at various points in the course. For instance, he used an application that allowed the students to view class slides on the screen of their tablet computer and smartphone during class. In addition, he used another application which enabled him to show what the students wrote with their tablet computer and smartphone on the screen in front of the classroom.
The study has three focal groups for the in-depth analyses. In the sociolinguistics research project, students were encouraged by the teacher to work in pairs. Focal groups were not pre-determined and were selected after the course began in April, 2015. Among the students who agreed to participate in the study, focal groups were selected from those who agreed: to be video-recorded while they work on the project outside the class, and to participate in three interviews outside the class. Among the students who agreed with out-of-class video-recording and interviews, three groups were selected as focal groups in order to maintain balance and variety between groups (Stake, 2005) taking into consideration gender and years in school stated in the background questionnaire. As shown in Table 4, the members of the focal groups were: Emi, Fuyu, and Sakura (Group 1); Jun, and Hiro (Group 2); and Momo and Wako (Group 3). Among the seven students in the three focal groups, Emi, Fuyu, and Sakura were the only third-year students and Jun and Hiro were the only male students. There were a total of 12 groups in class (11 pairs and one group of three).

Table 4. Profiles of Students in Focal Groups

<table>
<thead>
<tr>
<th>Focal Group</th>
<th>Name</th>
<th>Gender</th>
<th>University year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Emi</td>
<td>Female</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Fuyu</td>
<td>Female</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Sakura</td>
<td>Female</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Jun</td>
<td>Male</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Hiro</td>
<td>Male</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Momo</td>
<td>Female</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Wako</td>
<td>Female</td>
<td>4</td>
</tr>
</tbody>
</table>
Ethical Considerations

In the following section, I discuss ethical considerations in regards to this study—steps taken for obtaining informed consent and the protection of participants’ anonymity. As required by Temple University, I completed the Collaborative Institutional Training Initiative (CITI) course on social/behavioral research in 2015 (For more information on the CITI Program, see www.citiprogram.org).

Student participants were informed of the purposes of the research before any data were collected. The following describes the three steps I took to obtain informed consent in the present study. First, I mentioned my interest in collecting data from the class soon after the semester began to prepare the students for further explanation and to give them sufficient time to decide whether they would like to participate in the study or not. Next, in Week 2, I told the students more details about the study. I made it explicit that their participation would be voluntary and that there would be no penalty if they decided not to participate, or if they decided to withdraw from the study. I waited until the next class meeting to allow time for the students to make their decision. Finally, I asked those students who agreed to participate in the study to sign the informed consent form (see Appendix B). In the process of obtaining student participants’ consent, I explained each step in advance to the teacher.

Moreover, all 25 student participants had freedom to choose the degree of their participation. In the study, there were a few students who agreed to participate partially. For example, they chose not to be video-recorded whereas they agreed to be audio-recorded. Because being video-recorded can be a sensitive matter, I always double-checked with the participants when I video-recorded students’ activities.
In the summer of 2014, I informed the teacher of the purpose of the study. He agreed to participate in the study and participated in the pilot study in the fall semester of 2014. Before the spring semester of 2015 began, I explained the study to the teacher again and obtained consent from him (See Appendix C).

Anonymity of the participants is maintained by the use of pseudonyms in all publications resulting from this study. Moreover, in order to maintain the participants’ privacy, all data collected in this study have been kept in safe places (e.g., video/audio-recordings saved in SD cards and computers, recordings in video cameras and IC recorders, consent forms, background surveys, copies of students’ writings). These places are locked and the digital data are protected with passwords. Only I have access to the data. In addition, when I asked the student participants to audio- and video-record their out-of-class activities for this study, I gave them an IC recorder and a video camera that had no data related to other participants. Although I have determined exactly how long the data will be kept, when there is no further need to keep the original data, they will be deleted or discarded properly so that no identifying information will be disclosed.

**Access to the Research Site**

Ethical considerations discussed above are closely related to the issue of access to the research site, participants, and data. In qualitative research, negotiation of access is a complex matter (Erickson, 1986; Hammersley & Atkinson, 1995). I negotiated my entry to the research site and access to data with the participants carefully and gradually. During the initial stages of negotiation of entry, I explained the study to
students and the teacher and obtained their agreement to participate by taking several steps as described below. I also chose not to video-record the lessons from Week 1 of the course in order to allow time for students to get used to my presence in class. Although the gradual negotiation delayed the collection of video data, I believe that the careful procedures were worth undergoing for establishing rapport with the participants.

**Data Collection**

In this section, I first introduce three pilot studies. I then present the schedule for data collection and describe each type of data collected in this study. Following the description, I explain which research question the data were used to address.

**Pilot Studies**

A series of pilot studies was conducted in order to prepare for this study. Here, I introduce three major pilot studies that contributed to the design of data collection in this study.

The first pilot study was conducted in the spring of 2011. Its purpose was to explore how students explain their content knowledge in a content-based English course at university. Students’ group interactions were audio-recorded and their written assignments, such as their project log and final written products, were collected during a 12-week group research project. A discourse analysis of students’ spoken and written texts showed that they used a wide variety of academic language functions. For example, instances of defining, comparing, and contrasting were
identified in students’ spoken interactions and written explanations (Fujimura, 2012). At the same time, however, the first pilot study made it clear that examining linguistic features is insufficient to examine how students construct explanations. Occasional long pauses and short utterances in the audio data suggested that meaning was being communicated not only through language but through other semiotic resources. As a result of the first pilot study, a need to examine students’ use of linguistic and nonlinguistic resources emerged.

The second pilot study was conducted in the fall of 2012. The purpose of the second pilot study was to examine how students use multimodal resources when they explain content knowledge in L2. Data were collected during a 10-week group research project in a university-level content-based course. Students’ group interactions were video-recorded and their written assignments were collected. A multimodal discourse analysis of students’ explanations using a software called ELAN (Querol-Julián & Fortanet-Gómez 2012) illustrated that meaning was communicated through multiple semiotic resources. For example, a female student used hand gestures to visually highlight points in her oral presentation and used eye contact to mark a transition to the next topic (Fujimura, 2013). ELAN was useful to examine details of the joint use of multimodal resources and was used in this study.

The third pilot study was conducted in the fall of 2014. The purposes of the third pilot study were to explore students’ content and L2 learning and to examine data collection methods in the context where this study was conducted. As explained above, I contacted the Canadian instructor who taught the sociolinguistics course and obtained permission to observe the lessons. All ten of his students agreed to participate
in the pilot study. I visited almost all lessons for the semester and collected the same set of data that were collected in the spring of 2015. The following is a list of data collected in the pilot study in the fall of 2014:

- background questionnaire
- class observations and field notes
- video-recordings of classes
- sociolinguistic research project proposals
- revised project proposals
- video-recordings of out-of-class group project work
- video-recordings of oral presentations
- final research reports
- interviews with students in two focal groups
- interviews with the teacher

Data collection in this pilot study helped me become familiar with activities and discursive contexts in the course. For example, the most typical type of in-class activity was teacher lectures, which were not monologues by the teacher but were constructed through dialogues with students. There were also several lessons in which students discussed their sociolinguistics research projects. The familiarity with types of activities and discursive contexts helped me engage in more detailed examinations of class discourse in this study.

Moreover, the experience collecting data in the course helped me become familiar with the procedure and notice some challenges. First, the complexity in managing to video-record group work outside the class emerged due to busy daily
schedules that the students and I had. Thus, during the pilot study of Fall 2014, I began to use LINE, a Japanese social networking service, with the students in a focal group. A function of LINE is to exchange instant messages with groups of people. This function of group chats enabled the students and me to communicate with each other quickly and helped me stay informed of their meeting schedules. In this study, LINE group chats were used again for easier communication between students in focal groups and me upon the students’ agreement. Second, video-recording two focal groups in class created a challenge because of the need to move two cameras in a short time. In this study, I had three focal groups. I video-recorded the three groups by setting up three cameras early and placing them near focal students before class started.

**Data Collection in Spring 2015**

The main period of data collection was the spring semester of 2015 (April – July). Multiple kinds of data were collected inside and outside of the sociolinguistics class during the five months. Figure 3 illustrates the schedule of data collection. Descriptions of each kind of data follow: the background questionnaire, class observations and field notes, audio-recordings of classes, written data, video data, and interviews. In addition, I obtained permission from students in the focal groups to contact them for follow-up interviews.
Background questionnaire. At the beginning of the study, student participants filled out a background questionnaire (Appendix D). The questionnaire was designed to collect data on the participants’ year in college, gender, age, English learning experience, overseas experiences, standardized test scores such as TOEIC and TOEFL, and other courses related to sociolinguistics they had taken/were taking. This was for collecting information on participant factors (e.g., year, gender, L2 capacities, the number of content-based English courses taken, and prior knowledge of sociolinguistics) that might have affected their learning in the target course. Moreover, information on the year in college and gender was referred to for selecting diverse focal students.
Class observations and field notes. I observed and took field notes of lessons of the sociolinguistics course for 15 weeks except for the days for the mid-term and final exams. The purposes of the class observations were: to gain an understanding of the context of the class in which the students’ sociolinguistics research project takes place, and to examine how the class discourse is constructed. Understanding the context of the class was important because I consider that the context shapes students’ learning and thus is an essential factor when analyzing discourse in-class and out-of-class group work.

As I did in the pilot study, I visited the first lesson to ask the students for permission to observe the class for a semester. After my visits for observations were permitted by the students, I started taking field notes in the first week of the course. During the observations, I sat in the back of the classroom, quietly observed the class, and took field notes. I made notes of contextual details (e.g., students’ seating, the use of blackboards and a TV monitor), types of tasks and activities (e.g., teacher lectures, reading quizzes, group discussions), and observer comments. These data were used to understand discursive contexts in class. I also drew on these data and triangulated it with the video-recordings to address Research Questions 2 (teacher explanations), 3a (student discourse in group work), and 3b (student discourse in oral presentations).

Audio-recordings of the classes. During the observations, the lessons were also audio-recorded with an IC recorder for two purposes. First, the audio-recordings were used to create a log of lessons because it was impossible to take notes of everything that took place in class. Second, when I noticed something important to the
study such as recurrent patterns in teacher explanations and the co-construction of explanations between the teacher and students, the audio-recordings were referred to in order to see if there were occurrences of the same patterns in previous lessons. These data helped me address Research Questions 2 (teacher explanations), 3a (student discourse in group work), and 3b (student discourse in oral presentations).

**Written data.** The written data were collected in and outside classes in the semester. They include written documents provided by the teacher and written assignments submitted by students. The following is a list of written data collected in the study and explanations of each type of data:

- The course syllabus
- Class handouts
- Research project proposals
- Revised research project proposals
- Students’ notes in group project work
- Slides and students’ notes for oral presentations
- Final research reports

**The course syllabus and class handouts.** The syllabus of the sociolinguistics course and class handouts prepared by the teacher were collected. These documents helped me to keep track of the contents of the lessons. Moreover, these documents were part of the discursive environment in which the students’ learning took place. For instance, in the syllabus, course objectives and assignments including the
sociolinguistics research project are described (See Appendix A for the course syllabus of Fall 2014). Therefore, these data provided me with important contextual information to address Research Questions 2 (teacher explanations), 3a (student discourse in group work), and 3b (student discourse in oral presentations), and 3c (student discourse in written reports).

**Research project proposals.** In Week 5, the students submitted a written proposal for their sociolinguistics research project. They needed to write in the proposal:

- their team members
- their topic of interest
- a specific question about the topic
- a hypothesis regarding what they believe the answer to the question will be
- at least one academic source they think they can use to answer their question

At the beginning of the course, the teacher had given the students a template that had separate sections for the above content. The students filled out the template and submitted the proposal on Edmodo. This task functioned as a discursive context for group discussions early in the project. Within a week after the proposals were submitted, the teacher electronically sent them his comments and a grade of their proposal (0 – 6 points). Moreover, some students revisited the proposal as they prepared for an oral presentation and wrote a final report. These proposals and comments by the teacher were collected as data. These data, the students’ proposals
and the teacher’s comments, were used to address Research Questions 3a (student discourse in group work), and 3b (student discourse in oral presentations), and 3c (student discourse in written reports).

**Revised project proposals.** In Week 7, the students submitted a revised research proposal. This task was optional, but the submission of a revised proposal was encouraged by the teacher. The students could raise their mark for the original proposal by revising it. It was observed that students revised their proposal by carefully going over the teacher’s feedback on the original proposal. These revised proposals were collected as data in this study. These data were used to address Research Questions 3a (student discourse in group work), and 3b (student discourse in oral presentations), and 3c (student discourse in written reports).

**Students’ notes in group project work.** Students often wrote their ideas as they engaged in project work. Some notes were produced as a record of their group discussion (e.g., key words, their plan). Some students brought notes in which they had written down ideas individually at home to facilitate group discussion. These notes were important sources of data on how students’ disciplinary knowledge was formed. The students in the focal groups gave me copies of the notes they used in group work upon my request, or, in some cases, I took photos of the notes. I drew on these data and triangulated them with the video-recordings of students’ group work to help address Research Questions 3a (student discourse in group work), and 3b (student discourse in oral presentations), and 3c (student discourse in written reports).
**Slides and students’ notes for oral presentations.** Slides and notes that students prepared for oral presentations were collected. Written text on slides and students’ notes were analyzed in comparison with transcripts of oral explanations (See below for the explanations of video-recordings of oral presentations). Because I investigated how students construct explanations of content knowledge across modes, the slides and students’ notes are important sources of data. These data were used to address Research Question 3b (student discourse in oral presentations).

**Final research reports.** After the course ends, students submitted a written report on their sociolinguistics research project. The following is a summary of the guidelines given in the course syllabus of Spring 2015 (See Appendix A for the complete course syllabus).

- The written report should be no more than 1,500 words in length.
- It should include citations and references.
- It can be submitted as team or individual reports can be submitted.

Copies of the final reports written by students were collected for an analysis of how they presented content knowledge in the written mode (See Appendix E for two final papers written by students). These data were used to address Research Question 3c (student discourse in written reports).
**Video data.** Video data were collected in and outside classes during the semester. They include some selected lessons, in-class and out-of-class project work of focal groups, and oral presentations. The following is a list of video data collected and explanations of each type of data:

- The classes (non-project lessons, in-class project work)
- Out-of-class project work
- Oral presentations

**The classes.** In addition to audio-recordings of the classes, two types of video-recordings were made during classes. The first type of video-recordings was made at an early stage of the course when in-class project work was not scheduled. The video recordings of non-project lessons were used to examine the discursive context of the course. It was observed in non-project lessons that the teacher used multimodal resources to explain content knowledge such as oral explanations, gesture, and slides. Students were often encouraged to participate in the class discourse by answering questions asked by the teacher. Thus, video-recordings of non-project lessons yielded important data on teacher explanations and explanations co-constructed in class. These data were used to address Research Question 2 (teacher explanations).

The second type is a series of video-recordings of three focal groups’ in-class project work. I asked the teacher to inform me when he would give students time to work on their projects in class, and I video-recorded the group work. These video-recordings are part of the data on how explanations were generated by students in the sociolinguistics research project. In the spring semester of 2015, I video-recorded all
of the in-class project work activities by the focal groups. These data were used to address Research Question 3a (student discourse in group work).

**Out-of-class group project work (Focal groups).** The three focal groups’ group work on their sociolinguistics research was video-recorded outside the class in four phases of the project:

- Writing a proposal for the sociolinguistics research project
- Revising the proposal for the project
- Preparing for the group oral presentation of the project
- Writing a final written report of the project

The focal students were asked to inform me in advance when they would meet to work on the sociolinguistics project outside the class. The group work was also audio-recorded with an IC recorder to keep the record of their work in case the video camera failed to work properly. In addition, as explained above, I received from the students copies of the notes they used in the group work. The video-recordings of out-of-class group project work are the main data source used to address Research Question 3a (student discourse in group work). Because the video-recordings captured the process in which students prepared for their oral presentation and wrote the final research report, the data were used to address Research Questions 3b (student discourse in oral presentations) and 3c (student discourse in written reports).
**Oral presentations.** In Weeks 13 and 14, each group gave a 15-minute oral presentation in class to report on their sociolinguistics research project. These oral presentations were video-recorded. Because the presentations were a multimodal event (e.g., the use of visual aids, gesture, facial expression), the video data of these presentations provided information about how students used both linguistic and non-linguistic resources to communicate their content knowledge. As noted above, the transcripts of the oral presentations were compared with students’ slides and notes as well as their final research reports. Such comparisons enabled me to examine how ideas were expressed in the written and visual modes. The video-recordings of students’ oral presentations were the main data source used to address Research Question 3b (student discourse in oral presentations).

**Interviews.** Interviews were conducted with students in focal groups and teacher. The interviews were scheduled at multiple points in time during the data collection period.

**Students in focal groups.** Each focal group was interviewed three times. These were semi-structured group interviews in which the students were asked about the progress of their project. The schedule for the interviews and purposes are summarized in Table 6. The interviews were conducted in English and Japanese. (See Appendix F for a list of questions to be asked in the interviews).
Table 5. *Schedule for Interviews with Students in Focal Groups*

<table>
<thead>
<tr>
<th>Scheduled time</th>
<th>Purposes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. After written proposals were submitted in Week 5.</td>
<td>Ask about the process in which students completed the written proposals</td>
</tr>
<tr>
<td>2. After students gave oral presentations in Weeks 13-14</td>
<td>Ask about the process in which students prepared for group oral presentations</td>
</tr>
<tr>
<td>3. After final written reports were submitted (after Week 15)</td>
<td>Ask about the process in which students completed final written reports</td>
</tr>
</tbody>
</table>

*The teacher.* Two interviews were conducted with the teacher during the study. These were semi-structured interviews to ask about the teacher’s perspectives about students’ sociolinguistics research projects. The schedule for the interviews and purposes are summarized in Table 6. The interviews were conducted in English (See Appendix G for a list of questions asked in the interviews).

Table 6. *Schedule for Interviews with the Teacher*

<table>
<thead>
<tr>
<th>Interviews</th>
<th>Purposes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. After feedback on revised proposals was given to students (in Week 7)</td>
<td>Ask about the teacher’s reaction to students’ proposals</td>
</tr>
<tr>
<td>2. After feedback on oral presentations was given to students (in Week 15)</td>
<td>Ask about the teacher’s reaction to students’ oral presentations</td>
</tr>
</tbody>
</table>

The interview data were used to examine the processes of the students’ learning from the students’ and the teacher’s perspectives. I drew on these data and triangulated them with the video-recordings of group work and oral presentations and final written
reports to address Research Questions 3a (student discourse in group work), and 3b (student discourse in oral presentations), and 3c (student discourse in written reports).

As described in this section, various data were collected for one academic semester. Data on students’ work in the sociolinguistics research project are in written, spoken, and visual modes, and were collected both inside and outside classes. Moreover, data were collected in the sociolinguistics course in order to understand the context of the project. The contextual information was referred to when students’ activities and discourse in the project were analyzed. Finally, member checking was done as the need arose during and after data analyses. In the next section, I explain how I analyzed the data collected for this study.

**Data Analyses**

The procedures are divided into four phases according to the purposes of analyses (Table 7). First, in order to gain an overall picture of activities in the sociolinguistics course, I started with an analysis of field notes. This initial phase of the analyses helped me describe discursive contexts in which the course project was situated. Second, I analyzed the course textbook and teacher explanations to examine how disciplinary knowledge was explained to the students in written and oral modes (Research Questions 1 and 2). Third, in-depth discourse analyses were conducted on students’ oral presentations and final written reports (Research Questions 3b and 3c). This was for understanding students’ accomplishments, or products, after they participated in a project—how they explained newly learned disciplinary knowledge in the oral and written modes. The last but important phase was analyses of students’
group work and written proposals to understand the process in which their disciplinary knowledge and explanations were constructed (Research Question 3a). The third and fourth phases of analyses were accompanied by analyses of interview data in order to examine the students’ discourse practices from their perspectives. In what follows, I elaborate on the data analyses procedures by types of data: classroom observation, online interaction, course textbook, video-recordings of class and group work, students’ written proposals and final reports for the sociolinguistics research project, and interview data.

Table 7. A Data Analysis Sequence

<table>
<thead>
<tr>
<th>Phase</th>
<th>Data Analysis</th>
<th>Purposes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Field notes</td>
<td>To understand types of classroom activities and discursive contexts in which a course project is situated</td>
</tr>
<tr>
<td>2</td>
<td>A course textbook&lt;br&gt;Video-recordings of class (teacher explanations)</td>
<td>To analyze how disciplinary knowledge is explained to students in the written and oral modes (Research Questions 1 and 2)</td>
</tr>
<tr>
<td>3</td>
<td>Video-recordings of class (students’ oral presentations)&lt;br&gt;Students’ final reports&lt;br&gt;Interview data (interviews about oral presentations and written reports)</td>
<td>To analyze how students explain disciplinary knowledge in oral and written forms at the final stage of the project (Research Questions 3b and 3c)</td>
</tr>
<tr>
<td>4</td>
<td>Video-recordings of group work&lt;br&gt;Students’ written proposals&lt;br&gt;Interview data (interviews about proposals and group work)</td>
<td>To analyze the process in which students construct explanations of disciplinary knowledge (Research Question 3a)</td>
</tr>
</tbody>
</table>
Classroom Observations

Classroom observation data were analyzed by reading the field notes carefully and repeatedly with a focus on types of activities, participation patterns, and the way disciplinary knowledge was communicated. In this process, I identified four types of classroom activities: lectures by the teacher, individual work (e.g., solving reading quizzes, solving questions given on class handouts), group work (e.g., discussion on the topic of the lesson, in-class group project work), and group oral presentations. Students’ participation patterns were different in each of these activity types. The activity types and participation patterns were examined together to consider discourse practices in given contexts.

Course Textbook

Sections in selected chapters in a course textbook were analyzed for their discursive organizations. This part of the analyses was informed by Young’s (2009) analysis of textbook explanations. As discussed in the previous chapter, Young observed that linguistic resources such as passives, nominalization, and technical vocabulary were frequently used in textbook explanations. In this part of the analyses, I mainly examined how such linguistic resources are used in the selected chapters.

Video-recordings of Classes and Group Work

Video-recordings of class and group work were carefully reviewed and catalogued prior to multimodal interaction analyses to gain an overall understanding of video-recorded interaction and select segments for multimodal discourse analyses. The
segments selected for multimodal interaction analyses were transcribe following transcription conventions provided by Atkinson (2011) (see Appendix H). Multimodal interaction analyses were then conducted on these segments of the video-recordings.

Video-recordings of the class were analyzed to examine how the teacher explained disciplinary knowledge. In this analysis, Gaulmyn’s (1986) three-phase framework of explanations was used: (a) identification of explanandum, (b) recursive explanations oriented toward the addressee, and (c) sanctioning the explanation. A focus of analyses was the second phase—how recursive explanations by the teacher were discursively organized. For instance, it was observed in class that the teacher used various strategies in his explanations such as using visual aids and providing an example from a Japanese context. In the multimodal analyses of teacher explanations, I aimed to identify multimodal strategies used by the teacher in recursive explanations. The findings are indicative of what constitutes discipline-appropriate explanations.

Video-recordings of group work and oral presentations were examined through fine-grained analyses informed by a sociocognitive approach to multimodal interaction analysis (Atkinson, 2011; Atkinson et al., 2007; Churchill et al., 2010). Adapted from the work of Goodwin (e.g., 2000, 2003), this approach focuses on how semiotic resources are used complementarily in the process of learning—language, nonlinguistic vocal behavior, gaze, facial expression, gesture, hand and body movement and orientation, tools, settings, roles and relations (e.g., expert-novice), and arrangements and practices (e.g., participation frameworks) (Atkinson, 2011). The first step of the analysis was to review the video data repeatedly to identify a phenomenon of interest. I sought to identify what semiotic resources students use to
align to given tasks, disciplinary knowledge and discourse, and each other. The second step of the analysis was to collect similar cases involving the target phenomena across time by reviewing the data intensively and extensively. The third was to conduct within-case and cross-case analyses. In this study, I analyze video-recordings collected from three focal groups to carry out within-case and cross-case analyses. Specific questions that I asked in multimodal discourse analyses are: (a) why certain interactional resources (e.g., gesture, L1, disciplinary terms) are used here and now, (b) how students’ use of the interactional resources changes over time, and (c) how students’ interaction changes over time in ways that might be indicative of learning.

**Students’ Written Proposals and Final Reports**

Students’ written proposals and final reports for the sociolinguistics research project were analyzed to examine how students explained their disciplinary knowledge in the written mode. Video data of students’ project work were also drawn upon to investigate their writing process. The final report was used to examine how students explained the knowledge gained in the sociolinguistics research project. The final report was compared with discursive data of group oral presentations to examine similarities and differences in student explanations between writing and speaking.

**Interview Data**

Interview data were used to examine the process of students’ learning from multiple perspectives through triangulation (See below for a detailed discussion of methodological triangulation). First, interviews with students in focal groups and the
teacher were reviewed to catalogue the data. Next, selected segments—parts related to the research questions of this study such as processes in which students completed the proposal and written report of the project, and prepared for the oral presentation—were transcribed. The process to complete the sociolinguistics research project involves making various decisions such as what to write in the proposal and how to explain their findings in the oral presentation and the written report. For instance, a few students stated in interviews that their knowledge of academic writing learned in the previous year helped them write the final paper. Such an emic view of the writing process would not be available through discourse analyses of their writing; thus, transcripts of student interviews were examined from the students’ perspectives to investigate how they coped with the literacy demands of the project and generated explanations of disciplinary knowledge. Transcripts of the teacher interviews were used to investigate how the teacher perceived the students’ performances.

Validity Issues

In qualitative research, it is important to identify possible threats to the validity of conclusions and develop ways to mitigate against them (Maxwell, 2005). According to Maxwell, qualitative researchers need to consider specific validity threats that can emerge in their research context. In this section, using a checklist provided by Maxwell, I discuss possible threats to validity of conclusions in this study and the strategies I used to address the threats.
**Researcher Bias and Reflexivity**

Two main sources of validity threats in this study are my bias and *reflexivity*—the impact that my presence gives on data. First, as Maxwell (2005) pointed out, the process of data collection and analysis always reflects the researcher’s subjectivity, or bias. For instance, my decision about locations and angles of video cameras affected the data because not everything could be captured by the three or four video cameras I used (e.g., individual students’ movements during a class). Moreover, when analyzing the video data, I might notice certain features and patterns in teacher explanations leaving others unnoticed. My subjectivity is a factor that has an impact on the whole research process from data collection and analysis to preparation of the final report.

Second, my presence as a researcher influenced the data, participants, and settings. For instance, it is plausible that I influenced what participants said and how they said it in interviews because interviews are co-constructed between the interviewer and the interviewee (Talmy, 2010). For example, it is possible that my status as a teacher affected what the students said in the interviews although I made a conscious effort to create a comfortable atmosphere and avoid asking leading questions. As Maxwell (2005) argued, what is needed in qualitative study is not to “eliminate” such threats to validity but to understand them. In the next section, I discuss five strategies I took to increase the validity of the present study.
Strategies for Addressing Validity Threats

Semester-long data collection. I used data obtained through my semester-long observations of the sociolinguistics course (e.g., my field notes, video-recordings of lessons, class handouts) and interview data to develop and test emergent hypotheses in my analyses. For instance, I observed how the teacher introduced new sociolinguistic concepts in class multiple times. The repeated observations enabled me to develop a hypothesis about a pattern in the teacher’s discourse moves when he explained new concepts to students (e.g., introducing a new term, presenting an example from a context that is familiar to students, giving feedback on students’ presentations). I could formulate and test such hypotheses because I continued the observations for a semester. By carefully testing emergent hypotheses using data I collected for a semester, I sought to avoid reporting findings based on premature inferences.

Prolonged engagement and thick description. My semester-long involvement in the sociolinguistics course enabled me to collect detailed and varied data about teaching and learning events in the course. I took field notes of teacher actions, tasks, students’ activities, and my thoughts on the observations. I also have numerous video/audio-recordings from the class and students’ group work that provide more “objective” views about the teacher’s and students’ actions and utterances. In addition, the repeated interviews yielded another set of data that were used to learn about teacher’s and students’ perceptions. I used the rich, contextualized data to test emergent hypotheses from various perspectives. Furthermore, through the pilot study
in the fall semester of 2014, I had become familiar with the progression of the course, which in turn helped me better understand the classes in the spring semester of 2015.

**Triangulation.** Among four types of triangulation outlined by Denzin (1970), I used *data triangulation* and *methodological triangulation*, which are two types of triangulation commonly used in case study research (Simons, 2009). As for data triangulation, the data in this study were collected at multiple points in time (e.g., semester-long observations, repeated interviews), in various spaces (e.g., in the classroom, in group study rooms), and from different people, the teacher and three focal groups of students. As for methodological triangulation, as noted above, data were collected through varied methods including observations, video-recording, and interviews. Thus, it was possible to examine the same instance using data collected through different methods. For instance, I used both my field notes and video data to analyze classroom activities and discourse. For analyzing students’ written reports, I collected copies of the reports and conducted interview with students to learn about their perspectives on the process and product of writing.

**Member checks.** Participants were contacted for member checking as the need arose during data analyses. I also asked them to check my interpretation during interviews; however making opportunities for member checking does not guarantee an increase in the validity of this study. For example, student participants might forget what they did or said, they might feel hesitant to express disagreement with my interpretation, and different participants might interpret the same data differently. In
order to maximize the benefits of member checking, I made the purposes of member checking clear to the participants: to achieve accurate, adequate, and fair representations (Simons, 2009). I also made the process of member checking available to the readers of this study.

Discrepant evidence and negative cases. Discrepant evidence and negative cases are important sources for detecting flaws in the analyses and interpretations (Maxwell, 2005). I looked for both supporting and discrepant evidence in order to consider alternative interpretation of data. For instance, as noted above, as I observed the sociolinguistics class, I developed hypotheses about steps taken by the teacher when he explained disciplinary concepts in class. In the data analyses, I examined data to see if there were instances that did not match the hypotheses and if there were, I considered alternative accounts and reported both supporting and discrepant instances.

Positionality

My positionality as a researcher has been shaped by multiple aspects of my identity: my nationality, L1, background as an English learner, gender, age, and positions as a teacher and a doctoral student. In what follows, I describe how I see the development of my positionality during the study.

Relationship with Student Participants

While I attended the sociolinguistics course in the spring semester of 2015 to collect data for this study, my position in relation to the students was affected by my
background and my position as a teacher. Unlike in the pilot study in the fall semester of 2014, all 25 students were new to me when I attended the first class in April, 2015. For the first few classes, I exchanged few words with the students; I gave a brief self-introduction and explanation of the study in English, and then I quietly sat in the back of the classroom and took notes in class. Although I exchanged formal greetings with the students before and after classes, my unfamiliarity and limited verbal interactions with them made me feel that my presence in the class was marginal.

My position as a teacher also likely affected my position in the class. I teach English classes at the university where the sociolinguistics course was taught. Although I teach outside the students’ department and I made my teaching context explicit in my self-introduction, it is likely that they regarded me as a teacher. For instance, some students used polite forms when they spoke with me in Japanese. In order to minimize the impact of my status as a teacher at the research site, I carefully and repeatedly explained that their participation was voluntary and that their participation had no relation to their evaluation in the sociolinguistics course.

However, there was also a positive side to the impact of my work on this study. Because I was almost always on campus, I could make myself available for the intensive data collection. I attended all classes except the dates for examinations, video-recorded students’ out-of-class group work that occurred at various times (e.g., in the morning, during lunch hour, in the evening) and in various places on campus (e.g., cafeteria, group study rooms, computer lab), and conducted 19 interviews.

Moreover, the fact that I am a Japanese learner of English is likely to have contributed to the development of my relationship with the students. As I continued to
attend the class, I learned the students’ names and occasionally engaged in conversations with them in Japanese before and after class. The topic of our conversations was sometimes English learning. I believe that the frequent encounters and interactions in L1 helped the students and me to get to know each other and to develop a sense of rapport. My gender also affected the development of my relation with the students to a certain degree considering that I chatted with female students more frequently than with male students.

**Relationship with the Teacher Participant**

My relation to the teacher participant was largely shaped by my position as a doctoral student. When I contacted him in the summer of 2014, I introduced myself as a doctoral student. Throughout the data collection period, my position continued to be that of a doctoral student in the research context in relation to the teacher participant because he was much more experienced in research in the field of language teaching and learning. This difference in expertise is likely to have contributed to the expert-novice relationship between us (the teacher was the expert and I was the novice). He was always willing to give me feedback and suggestions when I collected (e.g., the consent form, data collection procedures).

**Summary**

In this chapter, I described a case study approach, the school where the study was conducted, the English curriculum, the sociolinguistics course, the sociolinguistics research project, and the participants. I also explained how the data
were collected and analyzed. At the end of the chapter, I discussed validity issues and my positionality. In the next chapter, I examine the instructional discourse of the sociolinguistics course.
The purpose of this chapter is to examine how explanations of disciplinary knowledge are organized and presented in the textbook and lessons of the sociolinguistics course (Research Questions 1 and 2). Instructional discourse in textbooks and class teaching shapes the context of students’ learning and is a primary means for students to gain competence in the discipline (Hyland, 2009). When students learn a new discipline, it is important for them to understand not only content knowledge of the discipline but also how disciplinary knowledge is organized and presented. An understanding of such disciplinary practices facilitates students’ learning of content knowledge and helps them to successfully present their newly learned knowledge. Especially in tertiary education where students are often expected to produce extended explanations in oral presentations and written papers, gaining discipline-specific discourse competence is very important. Thus, in this chapter, I analyze how explanations of disciplinary knowledge are organized and presented in the textbook and the lessons. More specifically, I analyzed textbook and teacher explanations at two levels. First, I conducted a macro-level analysis on the organization of sociolinguistic knowledge in the textbook and the course. This part of the analysis helps illustrate an “epistemological map of disciplinary landscape” (Hyland, 2009, p. 112) in the sociolinguistics course. Second, because explanations are constructed toward their addressee in a specific context (Dalton-Puffer, 2007;
Gaulmyn, 1986), I conducted a micro-level analysis on discourse practices in a textbook chapter and lessons on dialects. In the micro-level analysis, I examined how the author and the teacher explained sociolinguistic knowledge about dialects using various semiotic resources. It is not within the scope of this study to use the findings of this chapter to evaluate student explanations. As Dalton-Puffer (2007) observed in her analysis on CLIL classroom discourse, explanations in instructional discourse and student-authored explanations differ in terms of their purposes and participant roles (i.e., a teacher explanation is targeted at students who are assumed not to possess knowledge of the explanandum whereas a student explanation is often largely targeted at a teacher who is likely to possess the knowledge). Thus, findings of this chapter are used as contextual information of students’ discourse, which is essential when considering their learning as situated processes.

**Audience, Goals, and Expected Learner Roles**

Instructional discourse is a situated practice embedded in its context. Thus, before moving to a macro-level analysis, I consider the external context of the instructional discourse in the sociolinguistics course. In Chapter 3, I presented the English curriculum of the university where this study was conducted (Table 1) and the overview of the sociolinguistics course including its goals (Table 2). In this section, by examining the course syllabus and prefaces of the course textbook, I clarify the target audience and goals of the course again, and in doing so I consider the expected roles of learners in the instructional discourse.
Gaining Familiarity with the Overview of the Field

As an introductory-level course, the sociolinguistics course aims to provide students with an overview of the field. As stated in Chapter 3, this course is for juniors and seniors majoring in English. Students are not required to have prior knowledge of the field although there are other sociolinguistics classes available to them. Similarly, the course textbook, *An Introduction to Sociolinguistics, Fourth Edition* (Holmes, 2013), is an introductory-level one, and the author makes it clear that the book is written for “people who have never heard of sociolinguistics, but who would like to know what it is” (p. xv). For novice learners, it is not always easy to grasp what constitutes discipline-appropriate knowledge. In such circumstances where the target audience lacks foundational knowledge, it becomes the textbook writer and the teacher’s task to define the domain and to help the learners gain familiarity with the overview of the field. According to the syllabus, the course aims to provide students with opportunities to:

- gain in-depth knowledge on topics related to the study of language and society
- develop a deeper knowledge of how all human activity is embedded in language practices which reflect and reinforce sociohistorical forces, constructs and identities

(From the course syllabus, spring 2015)

In the above statements, subject topics are broadly specified such as the study of language and society, language practices, and sociohistorical forces, which suggests that various subject topics regarding language and society are addressed in the course.
The lessons covered a broad range of topics, most of which correspond with the contents of the textbook (See Table 8 for the content of the textbook). Although the last six chapters of the book were excluded from the class schedule probably due to the limited course duration, all of the topics in the first ten chapters were included in the course.

Table 8. Contents in the Course Textbook (Holmes, 2013)

<table>
<thead>
<tr>
<th>Section</th>
<th>Chapter</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>Language choice in multilingual communities</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Language maintenance and shift</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Linguistic varieties and multilingual nations</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>National languages and language planning</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>Regional and social dialects</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Gender and age</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Ethnicity and social networks</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>Language change</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>Style, context and register</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Speech functions, politeness and cross-cultural communication</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>Gender, politeness and stereotypes</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>Language, cognition and culture</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Analyzing discourse</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>Attitudes and applications</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>Conclusion</td>
</tr>
</tbody>
</table>

Considering that most of the topics covered in Holmes’ book are also addressed in other introductory-level sociolinguistics textbooks, the students in the sociolinguistics course were exposed to widely accepted knowledge in the field. For instance, language variation and change, language choice, language maintenance, dialects, and gender also appear in *An Introduction to Sociolinguistics, Seventh Edition* (Wardhaugh & Fuller, 2015) and *Introducing Sociolinguistics, Second Edition* (Mesthrie, Swann, Deumert, & Leap, 2009). There are two points to be made about the
extensive overlap of content in these textbooks. The first point is that these topics are widely considered to be instrumental to defining the academic discipline of sociolinguistics. To generalize, an important practice in academic disciplines is the selection, and implicit exclusion, of content areas. Holmes’ textbook is therefore a reconstruction of the field’s ways of defining the domain for neophytes. Second, in terms of this study’s methodology, the extensive overlap of content across textbooks in sociolinguistics helps support the potential transferability of the analysis of this textbook and class context to other courses on sociolinguistics and similar disciplines.

**Playing an Active Role in Disciplinary Discourse**

In the sociolinguistics course, students also need to move beyond gaining familiarity with established subject knowledge. According to the syllabus, the course aims to provide students with opportunities to:

- develop the ability to analyze language samples to identify social markers
- develop the ability to conduct, interpret, and report research both in oral and written forms

(From the course syllabus, spring 2015)

Achieving these goals requires students to take an active role in their relation to disciplinary knowledge, that is, they need to become capable of examining language data and generating discipline-specific knowledge. Reflecting these goals, the course involves the sociolinguistics research project as well as various tasks in which students analyze linguistic variation by social factors. In the textbook, Holmes provides a number of tasks in which readers are prompted to observe and analyze linguistic
variations around them. As discussed below, these pedagogical tasks are likely to reduce the distance between novice learners and disciplinary knowledge because the learners are given opportunities to practice participating in the disciplinary discourse. In sociocognitive terms, these pedagogical tasks are likely to facilitate students’ alignment with disciplinary knowledge.

In sum, the course syllabus and textbook suggest that there are dual roles and responsibilities cast on students/readers who are novice learners of sociolinguistics. First, they need to be recipients of established knowledge in the field and become familiar with the scope of the discipline. Second, they also need to be active in the process of learning by conducting research and analyzing linguistic data. In the next section, I examine how disciplinary knowledge is organized in the instructional discourse of the sociolinguistics course by conducting a macro-level analysis on the content of the textbook and lessons.

**Organization of Disciplinary Knowledge in the Textbook and Lessons**

As stated above, because the lessons of the sociolinguistics course largely followed the chapters of Holmes’ textbook, the thematic organization is similar to that of the textbook. Both the textbook and the lessons begin with an introduction to the field of sociolinguistics and then address issues related to multilingual communities, followed by discussions of issues related to monolingual communities. In this section, I discuss three features in the organization of disciplinary knowledge in the textbook and the lessons: laying out the scope of sociolinguistics, crafting the topic sequence, and hybrid organization.
Laying out the Scope of Sociolinguistics

The propositional content of the textbook and the lessons begins with a unit where the scope of sociolinguistics is laid out. The first chapter of Holmes’ book is entitled *what do sociolinguists study* and it is made clear in the chapter that sociolinguists study the relationship between language and society and are interested in why people speak differently depending on social context. Such a chapter where the scope of the domain is defined can be commonly found in other introductory sociolinguistics textbooks (e.g., Mesthrie et al., 2009; Wardhaugh & Fuller, 2015). For instance, the first chapter of Wardhaugh and Fuller’s *An Introduction to Sociolinguistics, Seventh Edition* (2015) is entitled *Introduction*, and the authors define sociolinguistics and introduce main themes of the field. Similarly, Mesthrie et al.’s *Introducing Sociolinguistics, Second Edition* (2009) begins with a chapter titled *Clearing the Ground: Basic Issues, Concepts and Approaches* in which the authors define sociolinguistics in relation to linguistics and lay out key issues that sociolinguists are concerned with.

A feature of Holmes’ introductory chapter among these books is that its content is organized in the format of questions and answers. The first half of the chapter has headings named *What is a sociolinguist*, *Why do we say the same thing in different ways*, and *What are the different ways we say things*. These rhetorical questions, immediately followed by answers, are a strategy for stimulating readers’ curiosity and introducing them to the writer’s viewpoint (Hyland, 2009). By presenting the questions, Holmes invites readers into a rhetorical interaction in the text where she points out a gap in knowledge to be filled. Moreover, by subsequently
answering the questions, she illustrates the domain and the scope of sociolinguistics for novices who do not possess the schema of the field. Simultaneously, the question-answer format enables her to establish a relationship of *an explainer and addressees* between herself and readers, which is considered as part of an initial step in the construction of explanations (Gaulmyn, 1986).

The lessons also began with an introduction to the field of sociolinguistics. In the first lesson, the teacher told the students that sociolinguistics is the study of the relationship between language and society. The students were given in this first lesson a copy of a course syllabus which stated that “this course will provide a broad overview of the field of sociolinguistics” (Appendix A). In the second lesson, the teacher asked the students to define language, society, and sociolinguistics. In this task, the students engaged in a small-group discussion, which was followed by a whole-class discussion. When the students’ answers were shared in class, the teacher gave evaluative feedback such as “good” and “very nice,” and elaborated on the answers. Thus, it can be said that the teacher enacted in class the interaction that Holmes rhetorically realized in the text. Moreover, the teacher revisited the content of the definition task as a review at the beginning of the third lesson. Therefore, the students were repeatedly reminded of the scope of the field.
Crafting the Topic Sequence

Following the introductory chapter, a wide range of topics are addressed in subsequent 15 chapters. The content of these chapters is divided into three sections as follows.

Section I Multilingual Speech Communities (Chapters 2–5)
Section II Language Variation: Focus on Users (Chapters 6–9)
Section II Language Variation: Focus on Uses (Chapters 10–16)

A topic sequence is an important aspect of the thematic organization of instructional discourse because it can aid, or hinder, learners’ understanding of the content. When introducing the organization of the book in the first chapter, Holmes (2013) states:

The relationship between linguistic choices and the social contexts in which they are made is sometimes easiest to see when different languages are involved. The first section of this book focuses on multilingual speech communities and describes some of the ways in which social considerations affect language choice. (p. 12)

In this statement, it is implied that a factor that influenced the sequence of topics is saliency. Sequencing topics from more salient to less salient ones can scaffold readers’ understanding because it allows them to learn new concepts in a familiar context first and then apply the knowledge to a less familiar context. A similar practice of sequencing topics from more salient to less salient ones can be found in the sequence of topics within each chapter. In what follows, I examine how disciplinary knowledge is organized in the chapter on dialects—a topic that was chosen by a main focal group of this study for their sociolinguistics research project.
Organization of knowledge within a chapter: Dialects. Sociolinguistics, like most other academic disciplines, creates taxonomies and categories that need to be described and explained. Accordingly, textbooks and class teaching are an embodiment of such taxonomies—the content knowledge addressed in textbooks and classes is organized into disciplinary categories. The textbook chapter, Regional and social dialects, reflects the way knowledge on dialects is organized in sociolinguistics (See Table 9 for the content of the chapter). First, the selection of topics in the chapter conforms to disciplinary taxonomy of dialects. Categorizing dialects into two subcategories, regional and social dialects, is a disciplinary practice that can be seen in other introductory sociolinguistics textbooks (e.g., Mesthrie et al., 2009; Wardhaugh & Fuller, 2015). Moreover, three linguistic aspects focused on in the discussion of social dialects—vocabulary, pronunciation, and grammatical patterns—correspond with a widely applied taxonomy in linguistics. Considering that sociolinguistics is a branch of linguistics, the use of these linguistic categories is quite understandable. By observing a widely recognized taxonomy in linguistics, readers can be socialized into disciplinary ways of interpreting target phenomena.

Second, topics are sequenced according to saliency. As shown in Table 9, a discussion of regional dialects precedes that of social dialects. It is likely that regional dialects are easier to recognize than social variations. In fact, when the teacher asked students what comes up to mind when they hear the word dialect, all of their answers were related to regional dialects, not social dialects. In addition, it can be assumed that content knowledge of regional dialects is easier to understand than that of social dialects because it is more concrete. For instance, while the topic of regional dialects
is discussed using the names of specific places (e.g., England, the United States, Australia, London, New York), social dialects are associated with conceptual entities such as social prestige and material resources. This way of organizing disciplinary knowledge enables field specific concepts such as regional and social dialects to be explained in contexts that are maximally accessible to learners before they are applied to less familiar areas.

Table 9. Contents in the Textbook Chapter on Dialects (Holmes, 2013)

<table>
<thead>
<tr>
<th>Chapter 6 Regional and social dialects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional variation</td>
</tr>
<tr>
<td>International variation</td>
</tr>
<tr>
<td>Intra-national or intra-continental variation</td>
</tr>
<tr>
<td>Cross-continental variation: dialect chains</td>
</tr>
<tr>
<td>Social variation</td>
</tr>
<tr>
<td>RP: a social accent</td>
</tr>
<tr>
<td>Social dialects</td>
</tr>
<tr>
<td>Standard English</td>
</tr>
<tr>
<td>Caste dialects</td>
</tr>
<tr>
<td>Social class dialects</td>
</tr>
<tr>
<td>Vocabulary</td>
</tr>
<tr>
<td>Pronunciation</td>
</tr>
<tr>
<td>Grammatical patterns</td>
</tr>
<tr>
<td>A note on methodology</td>
</tr>
<tr>
<td>Conclusion</td>
</tr>
<tr>
<td>Answers to exercises in chapter 6</td>
</tr>
<tr>
<td>Concepts introduced</td>
</tr>
<tr>
<td>References</td>
</tr>
<tr>
<td>Quotations</td>
</tr>
<tr>
<td>Useful additional reading</td>
</tr>
<tr>
<td>Notes</td>
</tr>
</tbody>
</table>

**Hybrid Organization**

An examination of the textbook and the lessons also revealed that the content is organized with various pedagogical elements. For instance, in addition to main text, many examples, exercises, maps, and diagrams are included in the textbook. In class,
each lesson consisted of various types of tasks such as review questions, a reading quiz, teacher lecture, and group discussion. In this section, I examine how such pedagogical elements contribute to the hybrid nature of the organization of the course.

In Holmes’ textbook, examples and exercises are distinctive features because of the frequency of their use and the way they are laid out on the pages. Figure 4 shows the layout of the first page of the chapter on dialects (Chapter 6). As shown in the figure, Example 1, which is an excerpt of a phone call, is visually enhanced by a box surrounding it and is set apart from the main text. Chapter 6 has 18 examples formatted in this way and their content varies from excerpts of conversations to anecdotes related to propositional topics under discussion. Exercises, which are also visually enhanced and set apart from the main text, often appear in the textbook. Chapter 6 has eight exercises asking students to complete tasks such as data collection, preview and review of key concepts, and data interpretation.

In these examples and exercises, different linguistic resources that result in distinctive ways of representing subject knowledge are used. In the examples, which are primarily constructed with animate subjects, active voice, verb phrases, and names of people and places (e.g., Pat, Mark, Guangdong Province in southern China), the content is expressed in concrete contexts. On the other hand, the exercises contain instructions constructed with interrogatives and the second person pronoun you, or directives. Thus, readers are directly addressed in the exercises and are instructed to collect data in their surroundings, or are given language material to analyze (e.g., a list of vocabulary or sentences). The frequent use of such examples and exercises creates
an organizational rhythm in Holmes’ book and provides novice learners with texts whose discourse is more accessible to them.

In addition, many diagrams, tables, graphs, and maps are used in the textbook. In these visual representations, the way sociolinguistic knowledge is organized differs from that in the main text. For instance, in a figure entitled ‘Words for splinter in English dialects’ (Holmes, 2013, p. 136), regional variation for the word splinter is represented as boundary lines drawn on a map of England (e.g., splint, spell, sliver). In a diagram entitled Social and regional accent variation (Holmes, 2013, p. 139), a relationship between social and regional variation in accents in English is represented in the shape of a triangle, whose top angle indicates a narrow range of variants used by people at upper socioeconomic levels whereas the bottom of the triangle indicates a wide range of variants used by people at lower socioeconomic levels. Thus, in these representations, visual information is as important as text information, and novice learners need to learn to interpret meanings represented through configurations of multiple semiotic resources (Kress et al., 2005) to gain competence in the discipline.

In class, the teacher incorporated various types of activities. As Table 10 shows, a lesson usually consisted of three phases. The teacher often started each lesson with a review of the content covered in a previous class. For instance, in Lesson 3, the teacher first showed a slide with a list of terms to review (i.e., sociolinguistics, language, society, variation, a linguistic repertoire) and the students were asked to discuss definitions of the terms in groups. This small-group work was then followed by a teacher-led whole class discussion in which students’ answers were shared and the teacher gave feedback. In the main part of the lessons, the teacher gave a lecture on new propositional content. The lectures were usually highly interactive—a feature widely observed in CLIL classes (Dalton-Puffer, 2007; Llinares & Whittaker, 2010;
Nikula, 2010). He frequently asked questions to the students and built on their answers to explain propositional content. There were also occasions in which the students were asked to work in small groups to come up with examples of newly learned knowledge (e.g., examples of regional and social dialects in Japan). Moreover, once the sociolinguistics research project began, the teacher sometimes gave the students time to work on their project in class. Such a wide variety of activities generated diverse discursive contexts, which, in turn, resulted in different frameworks for the students to participate in the class discourse.

Table 10. Types of Activities Observed in Lessons

<table>
<thead>
<tr>
<th>Phase</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening</td>
<td>Review tasks (e.g., definitions of terms, examples of key concepts)</td>
</tr>
<tr>
<td>Main lesson</td>
<td>Teacher-lecture, teacher-led whole class discussion, small group discussion, reading quizzes, individual / small-group writing tasks, project work (in groups)</td>
</tr>
<tr>
<td>Closing</td>
<td>Announcement of homework, plans for next class</td>
</tr>
</tbody>
</table>

Discourse Practices in Textbook and Teacher Explanations of Dialects

In this section, I present a micro-level analysis of discourse practices in textbook and teacher explanations. For consistency, the focus is on the topic of dialects. The analysis is divided into three sections, each of which represents discourse practice that recursively occurred in the collected data: explicit signaling of a topic shift, an explanation pattern in which specific examples were transformed to abstract disciplinary knowledge, and another explanation pattern in which abstract disciplinary terms and concepts were elaborated through exemplification. These patterns are presented below according to their general sequence of discourse observed. In the first
section, I describe the way in which the textbook author and the teacher signal topic shifts. In the second section, I analyze how they draw on specific examples to introduce and develop abstract disciplinary knowledge. Finally, in the third section, I examine how dense disciplinary knowledge is explained through exemplification.

Explicit Signaling of a Topic Shift

Sketching out disciplinary knowledge is a feature of instructional discourse (Hyland, 2005). Especially when the target audience is novice learners, it is important to outline the organization of the knowledge and signal upcoming topics so that unfamiliar content can be accessible to them. Previous research shows that introductory textbook writers often clarify logical connections between concepts and refer to specific parts of text such as sections and illustrations more frequently than in other genres such as research articles (Hyland, 1998). In the sociolinguistics course, target topics were often signaled explicitly. In the textbook, the author used specific metadiscourse resources to mark topic shifts. In class, the teacher used similar metadiscourse resources, but in a slightly different way and accomplished topic shifts more interactively.

In the textbook, an explicit signaling of a topic shift was most evident at the beginning of the chapter. Excerpt 4.1 is the first paragraph of Chapter 6.

Excerpt 4.1 Indicating a topic shift (Textbook)

[1] In the first section of this book, the focus was on language variation in multilingual communities. [2] In this section, the focus moves to language
variation in monolingual communities. [3] People often use a language to signal their membership of particular groups and to construct different aspects of their social identity. [4] Social status, gender, age, ethnicity and the kinds of social networks that people belong to turn out to be important dimensions of identity in many communities. [5] I will illustrate the way people use language to signal and enact such affiliations in this second section of this book. (Holmes, 2013, p. 131)

In this introductory paragraph, Holmes navigates the readers through a topic shift step by step. First, she reminds them of the focus in the first section of the book (In the first section of this book, the focus was on language variation in multilingual communities, Sentence 1) and announces a focus of the second section, which this chapter belongs to (In this section, the focus moves to language variation in monolingual communities, Sentence 2). After presenting propositional content (Sentences 3 and 4), she concludes the paragraph with a goal statement for this section (I will illustrate the way people use language to signal and enact such affiliations ..., Sentence 5). These discourse moves can be summarized as follows.

1. REVIEW: The author provides a review of a previous part.
2. TOPIC SHIFT: The author announces a shift of topics.
3. EXPOSITION: The author presents a key disciplinary idea.
4. GOAL AND TOPIC SHIFT: The author states a goal of an upcoming part.

A similar discourse pattern can be observed later in the chapter when the author moves to a discussion on social dialects.
Excerpt 4.2 Indicating a topic shift (Textbook)

REVIEW [1] So far I have been discussing accents and dialects as if the linguistic features which indentify them were stable, fixed and absolute.

EXPOSITION [2] But, as with the notion of distinguishable languages, this is just a conventional fiction. [3] The way people speak is characterized by patterned variation. [4] The patterns are fascinating and indicate the social factors which are significant in a society.

GOAL [5] To illustrate this point, the rest of this chapter will discuss the relationship between speech and social status or class. (Holmes, 2013, p. 141)

In Sentence 1, she reminds the readers of a topic in the previous discussion, linguistic features of accents and dialects. In Sentences 2, 3, and 4, she presents a disciplinary view that accents and dialects are not absolute features and that there is variation in the ways people speak. In Sentence 5, she reveals the focus of a subsequent discussion, the relationship between speech and social status. These signposts allow the readers to see connections between segments of text and to anticipate an upcoming topic.

Here it should be noted how the first-person pronoun I is used by the author. I is a metadiscourse marker that makes the presence of the author explicit in the text (Hyland, 1999, 2004). In Excerpts 4.1 and 4.2, I is used and thus the author’s presence is marked when announcing the organization of the discourse (Sentence 5 in Excerpt 4.1, Sentence 1 in Excerpt 4.2). On the other hand, I is not used when presenting
disciplinary ideas (Sentences 3 and 4 in Excerpt 4.1, Sentences 2, 3, and 4 in Excerpt 4.2), which makes her presence less visible. Such selective use of I enables Holmes to play a role as a friendly guide who navigates the readers through the text while remaining unmarked when presenting disciplinary knowledge.

Explicit signaling of topic shifts was also observed in the lessons. Excerpt 4.3 illustrates how the teacher shifted topics from language planning to dialects in Lesson 13. As seen in Picture 4.1, the teacher was standing at the front of the students, who were sitting at their desks facing each other. Behind a teacher’s desk, there was a large whiteboard, half of which was used as a screen to show class slides prepared by the teacher. In class, the slides could be also viewed by the students on the screen of their digital device such as a smartphone and a tablet computer.

Excerpt 4.3 Indicating a topic shift (Teacher)

1 T: okay final chance. **any questions about** language planning, policy
2 ((looks around class [Picture 4.1]))

*Picture 4.1. The teacher looks around the class.*
At the beginning of Excerpt 4.3, the teacher initiated a topic shift sequence by asking the students if they had questions about the previous topic, i.e., language planning (any questions about ..., line 1). After confirming that there was no signal for questions from the students (line 3), he announced a topic shift (I wanna now move to ..., line 5). He then asked them a question to elicit their ideas about dialects (when you hear the word dialect ..., line 6) and drew on the students’ answers to introduce sociolinguistic approaches to dialects. More specifically, after the students provided short answers such as Kyoto dialect and Osaka dialect, he pointed out people’s general image of dialects and introduced discipline-specific views on dialects. These discourse moves by the teacher can be summarized as follows.

1. COMPREHENSION CHECK: The teacher checks comprehension of the students.
2. TOPIC SHIFT: The teacher announces a shift of topics.
3. ELICITATION QUESTION: The teacher asks questions to elicit ideas from the students.
4. EXPOSITION: The teacher introduces a key disciplinary idea.
In a subsequent lesson, a topic shift was made by the teacher in a similar sequence.

Excerpt 4.4 Indicating a topic shift (Teacher)

COMP CHECK 1 T: ((changes slides)) that’s kind of the end for regional dialects. any questions about regional dialects or language versus dialects?
2 Ss: (2.5)

TOPIC SHIFT 5 T: ((nods and turns to the screen)) the other one is that’s famous (xx) social dialects. uh: in your own words, what’s a social dialect?
ELICITATION Q 6
7 (Lesson 14, June 2)

In Excerpt 4.4, the teacher first changed the slides, which can function as a nonverbal signal of a topic shift, and announced the end of the explanation on regional dialects (that’s kind of the end for regional dialects, line 1). He then asked the students if they had questions, which is the same discourse move as the one in Excerpt 4.3 (line 1). Having confirmed there were no questions (line 4), he acknowledged it by the head movement (line 5) and presented the next topic (the other one is ..., line 5). After that, he asked a question to elicit definitions of a social dialect from the students (in your own words, what’s a social dialect, line 6). The elicitation question was followed by an exposition of what a social dialect is.

Excerpts 4.3 and 4.4 illustrate the teacher’s attempt to accomplish topic shifts interactionally. In both instances, he opened the floor to the students by asking comprehension questions and elicitation questions. He also signaled the students’ involvement in the discourse by using the second person pronoun you, a metadiscourse
marker to include the addressee as a discourse participant (Hyland, 2005), in the elicitation questions (line 6 in Excerpt 4.3, line 6 in Excerpt 4.4). These discourse moves are likely to lead the students to become co-participants in the construction of topic shifts under the teacher’s guidance while simultaneously reinforcing the teacher’s role as a primary knower/speaker. Although the students’ participation might not be evident because they made no verbal contributions, the teacher’s subsequent utterance (okay? I wanna now move to … in Excerpt 4.3) and nonverbal behavior (nodding head movement in Excerpt 4.4) suggest that the silence was acknowledged as their reply to the comprehension questions, that is, No, we do not have any questions, in these sequences. Such interactional accomplishment of topic shifts seems to correspond with dialogic teaching observed in CLIL classrooms (Dalton-Puffer, 2007; Nikula, 2010).

When we consider the above excerpts from the textbook and the lessons, it becomes clear that there are similarities and differences between the textbook author and the teacher in their discourse practices in topic shift sequences. As shown in Table 11, they both used metadiscourse resources to frame the text and the talk, and signaled topic shifts. A closer look at the discourse practices, however, suggests that the ways in which the author and the teacher built a relationship with the audience were slightly different. In the textbook (Holmes, 2013), when the author referred to the organization of text, the subject of the sentences was either I or an inanimate noun:

1. In the first section of this book, the focus was on language variation in multilingual communities. (p. 131)

2. In this section, the focus moves to language variation in monolingual
3. I will illustrate the way people use language to signal and enact such affiliations in this second section of this book. (p. 131)

4. So far I have been discussing accents and dialects as if the linguistic features which indentify them were stable, fixed and absolute. (p. 141)

5. To illustrate this point, the rest of this chapter will discuss the relationship between speech and social status or class. (p. 142)

On the other hand, when the teacher signaled a topic shift or talked about a lesson outline, the subject of the utterances was either I:

6. I wanna now move to the to (x) chapter six (Lesson 13, May 28)

or, in other parts of the lessons, he used an inclusive pronoun we:

7. we’re gonna start talking about dialects and social dialects (Lesson 14, June 2)

8. we’ll talk little bit about hypercorrection and finish that, and New York Study (Lesson 15, June 4)

A consequence of this difference is that while the textbook author appears to keep herself and the readers separate, the teacher constructed the students as subjective participants (Young & Nguyen, 2002) by creating a social situation in which he and the students are about to learn disciplinary knowledge together, or joint agency (Ogborn, Kress, Martins, & McGillicuddy, 1996, p. 23). Moreover, as discussed above, the teacher used a wider variety of semiotic resources in the construction of topic shifts (e.g., turn taking, body orientation, gaze, head movement). Such multimodal discourse moves, which were repeatedly observed in the teacher’s explanations, are
likely to make propositional content more accessible to the students. In sum, it was observed that although both the author and the teacher explicitly signaled topic shifts, they differed in the discourse practices to accomplish the discourse moves.

<table>
<thead>
<tr>
<th>Table 11. Discursive Resources Used for Shifting Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Textbook</strong></td>
</tr>
<tr>
<td>Metadiscourse resources</td>
</tr>
<tr>
<td>Frame markers (e.g., <em>in the first section of this book, in this section, so far, move to</em>)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Transforming Examples to Disciplinary Knowledge**

After target topics were announced, disciplinary knowledge was explained in various ways in the textbook and the lessons. Explaining subject-specific knowledge through exemplification and paraphrasing is a common practice in instructional discourse (e.g., Dalton-Puffer, 2007; Young & Nguyen, 2002). While such explanations were frequently observed in the textbook and the lessons, there were also instances where a contextualized example was presented first and then was transformed into sociolinguistic knowledge. In such discourse practice, the textbook author and the teacher used various linguistic resources and, in case of in-class teacher explanations, other semiotic resources such as gesture and body movement.

Excerpt 4.5 illustrates how the textbook author uses an example to introduce a target concept in a familiar context and transforms it into disciplinary knowledge.
through linguistic and rhetorical choices. This excerpt immediately follows the first paragraph of Chapter 6 (Excerpt 4.1). As seen below, it consists of a phone conversation and subsequent main text.

Excerpt 4.5 Transforming an example into disciplinary knowledge (Textbook)

<table>
<thead>
<tr>
<th>Example 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Telephone rings.</em></td>
</tr>
<tr>
<td>Pat:</td>
</tr>
<tr>
<td>Caller:</td>
</tr>
<tr>
<td>Pat:</td>
</tr>
<tr>
<td>Pat (to Mark):</td>
</tr>
</tbody>
</table>

[1] When *you* answer the telephone, *you* can often make some pretty accurate guesses about various characteristics of the speaker. [2] *Pat* was able to deduce quite a lot about Mark’s caller, even though the caller had said nothing explicitly about herself. (Holmes, 2013, p. 131)

In the phone conversation, a target phenomenon is acted out by two speakers, Pat and the caller (The caller’s social identity was signaled by her speech). Their exchange is in general language and, except for the last line by Pat, follows a typical procedure of an everyday phone conversation. Here the example is presented as a here-and-now situation, and deeply embedded in a specific context. In the subsequent main text, Holmes first presents a claim: *When you answer the telephone, you can often make some pretty accurate guesses about various characteristics of the speaker* (Sentence 1). In this sentence, meaning is still expressed in general language (e.g., *answer the phone, make some pretty guess*), and she rhetorically constructs the reader as subjective participants (Young & Nguyen, 2002) in the target phenomenon by using the second
person subject you, which functions to involve its addressee in a hypothetical world of action (Hyland, 2009). Thus, it can be argued that, through the use of you, Holmes facilitates the readers’ alignment with the exemplified situation. In Sentence 2, she then replaces the subject with a third person (Pat), and constructs the sentence in the past tense (was able to). As a result, the phone conversation is framed as a fact in the past, which functions to support the propositional claim made in Sentence 1. In this second sentence, the lexical choice has been partly changed from the non-academic expression make pretty accurate guess (Sentence 1) to an academic lexicon deduce (Sentence 2).

The same propositional content was revisited a few times in Chapter 6. The following three sentences appear later in the chapter, initially through the use of first and second person pronouns, but later in more impersonal academic language:

3. We signal our group affiliations and our social identities by the speech forms we use. (p.132)

4. The way you speak is usually a good indicator of your social background. (p. 155)

5. The evidence discussed indicates that the social class someone belongs to is generally signaled by their speech patterns. (p. 155)

These sentences address a similar point with different linguistic resources, which enable the author to work from specific statements to a more generalizable claim consistent with disciplinary knowledge. In Sentence 3, although the reader is still involved in the target phenomenon by the use of we, the meaning is largely expressed in discipline-specific academic language (signal, group affiliation, social identities,
and *speech forms*). In Sentence 4, taken from the conclusion in this chapter, the joint use of the inanimate subject *the way* and the copula *is* enables Holmes to present the meaning as decontextualized knowledge. In Sentence 5, which appears towards the end of the conclusion, reliability of the claim is emphasized by the main clause *the evidence discussed indicates*. Within this sentence, the content of the claim is constructed as an objective fact by the use of the inanimate subject *the social class* and the passive voice—a similar discourse practice to the one observed in Young and Nguyen’s (2002) analysis of a science textbook. Moreover, an unspecified third person *someone* has replaced *we* and *you*. As seen in Sentences 1-5, the same key idea is recursively addressed in the textbook, yet, the meaning is realized differently (See Table 12). After the target phenomenon was introduced as a contextualized example, the author presented the propositional claim in general language involving the readers in the phenomenon. Such discourse practice is likely to facilitate their alignment with the propositional content. She then addressed the claim using different linguistic resources such as academic language, inanimate subjects, and the passive forms. In this way, she gradually transformed the target phenomenon into decontextualized disciplinary knowledge.
Table 12. Discursive Resources Used for Transforming an Example into Disciplinary Knowledge (Textbook)

<table>
<thead>
<tr>
<th>Example</th>
<th>General language (a phone conversation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sentence 1</td>
<td>General language (e.g., <em>make pretty accurate guesses</em>)</td>
</tr>
<tr>
<td></td>
<td>Second person subject <em>you</em></td>
</tr>
<tr>
<td>Sentence 2</td>
<td>Academic language (e.g., <em>deduce</em>)</td>
</tr>
<tr>
<td></td>
<td>Third person <em>Pat</em></td>
</tr>
<tr>
<td></td>
<td>Past tense</td>
</tr>
<tr>
<td>Sentence 3</td>
<td>Academic language (e.g., <em>signal, group affiliation, social identities</em>)</td>
</tr>
<tr>
<td></td>
<td><em>we</em> (inclusive)</td>
</tr>
<tr>
<td>Sentence 4</td>
<td>Academic language (e.g., <em>indicator, social background</em>)</td>
</tr>
<tr>
<td></td>
<td>Inanimate subject <em>the way</em></td>
</tr>
<tr>
<td></td>
<td>Copula <em>is</em></td>
</tr>
<tr>
<td>Sentence 5</td>
<td>Academic language (e.g., <em>evidence, indicate, social class, speech patterns</em>)</td>
</tr>
<tr>
<td></td>
<td>Inanimate subjects <em>evidence, the social class</em> (that-clause)</td>
</tr>
<tr>
<td></td>
<td>Passive voice</td>
</tr>
</tbody>
</table>

Here it is also important to note that the propositional claim is hedged with expressions such as *usually* and *generally* (Sentences 4 and 5). These hedges are a metadiscourse resource which enables the writer to make a claim with a caution (Hyland, 1998, 2009). Although introductory textbooks tend to contain fewer instances of hedges than in other academic genres such as research articles (Hyland, 1999), there were other several instances of hedges in this chapter of the textbook as well as in teacher talk.

6. Vernacular dialects, like vernacular languages, lack public or overt prestige, though they are *generally* valued by their users, especially as means of expressing solidarity and affective meaning ... (Holmes, 2013, p 141)

7. Some features are stable and their patterns of use *seem* to have correlated with membership of particular social groups in a predictable way for many years. (Holmes, 2013, p. 155)

8. The way people use tag questions (*isn’t she, didn’t they*), for example, or
pragmatic particles such as you know, may also index their social groups.

(Holmes, 2013, p. 155)

9. language is often considered (to be) more standard or more official and
dialects are sometimes considered more non official or more vernacular

(Lesson 14, Jun 2)

As seen above, Holmes and the teacher hedge propositional claims with varied
linguistic resources such as adverbs (usually, generally, often, sometimes), a modal
auxiliary (may), and a verb (seem). The use of hedging expressions by the author and
the teacher seems natural when we consider the nature of sociolinguistics. Because the
discipline seeks to account for linguistic variation caused by social factors, which are
not necessarily fixed, making absolute claims risks oversimplifying the complex social
phenomena being addressed. Therefore, hedging is an important metadiscourse
resource to make propositional claims while leaving room for other interpretations. In
fact, a need for hedging became evident in teacher feedback on an oral presentation by
students, and thus it is addressed again in Chapter 6.

The example of the phone call illustrated how the textbook author transformed
a specific example into a generalizable claim about disciplinary knowledge. In the
classroom discourse, there were also instances in which the teacher drew on a specific
example to introduce disciplinary knowledge. Excerpts 4.6 and 4.7 illustrate how the
teacher introduced the term isogloss using an example in a lesson on regional dialects.
Because it is an extended sequence (2 minutes and 30 seconds), the excerpts are
presented below in two segments reflecting two phases in the sequence. In Excerpt 4.6,
the teacher varied the use of the terms soda, pop, coke, and soft drink among the
students publicly visible through dialogic teaching (Dalton-Puffer, 2007; Nikula, 2010), which in turn led them to become subjective participants (Young & Nguyen, 2002) in the class discourse. In Excerpt 4.7, he connected the students’ responses with disciplinary knowledge, elaborated on it, and introduced the term *isogloss*.

Excerpt 4.6 occurs toward the end of the first of the lessons on dialects (Lesson 13). Prior to this excerpt, the teacher talked about regional dialects in Japan and people’s perceptions about them using a color-coded map (Slide 1 in Figure 5). Although the term *isogloss* was presented on this slide, it was not initially mentioned in his oral explanation.

**Figure 5.** Slide 1 (Lesson 13, Dialects).

---

Excerpt 4.6 Isogloss (Part 1)—A sociolinguistic survey

1. T: ((changes slides and shows Slide 2 [Figure 6]; reorients body to students)) uh: *you* can s- *you* can study where the dialects are,

2. ((moves RH diagonally [Picture 4.2])) *you* can create these maps
those maps, by the way I’m just gonna show you: (oh probably)
((shows the next slide but immediately goes back to Slide 2)) we’ll do
this exercise first. uh I can even test in some way ((reorients body and
extends RA toward the students)) what kind of English you guys have
learned maybe, uh: what do you call this, ((points to the picture of
soda on Slide 2 [Picture 4.3])) in English. do you use the word soda?

pop, coke, or soft drink ((points to the four terms on Slide 2 one by
one)). raise your hand (if) you’d say soda ((raises RH and points to
the word soda on slide [Picture 4.4]))
13 Ss: (1.6) ((look in the direction of the slide. no students captured in the video raise hand [Picture 4.5]))

15 T: raise your hand if you would say pop. ((points to the word pop on slide))

17 Ss: (1.5) ((five students raise hand [Picture 4.6]))
Five students raise their hand for pop.

18 T  raise your hand if you(’d) say coke. ((points to the word coke on
19     slide))
20 Ss (1.6) ((four students raise hand))
21 T: even though it’s not coke. and soft drink?
22 Ss (1.6) ((two students raise hand))
23 T: interesting. so can be (.) **kind of split** actually (xx) ((moves palms of
24     R and LH in front of his chest [Picture 4.7]))

The teacher moves the palms of his hands in front of his chest.

(Lesson 13, May 28)
At the beginning of the excerpt, the teacher changed the slides, and showed a slide with a picture of three bottles of soft drink (Slide 2 in Figure 6). The choice of this example (i.e., soft drink) is likely to reflect the addressee-orientation of explanations (Dalton-Puffer, 2007; Gaulmyn, 1986). He selectively used a familiar item as an example in order to reduce the distance between the students and disciplinary knowledge, or, in sociocognitive terms, to help the students align to target disciplinary knowledge. After reorienting his body toward the students, the teacher then said, *you can study where the dialects are, you can create those maps* (line 2) referring to the map on Slide 1 (Figure 5), and simultaneously moved his right hand diagonally from the level of his head to his waist (Picture 4.2). This hand movement, which appears to be a metaphoric gesture (McNeill, 1992) representing a spatial spread of regional dialects, allows the teacher to make the invisible distribution of dialects perceptually salient in his talk. It should be also noted that he repeatedly used the interactional discourse marker *you* (Hyland, 2005) in this utterance (e.g., *you can*...
study, you can create). While the word you can refer to people in general, the teacher’s body, gaze, and gesture, all of which were oriented toward the students, suggest that its referent was the students. It can be thus said that the teacher established a participation framework (Goffman, 1981) where the students were assigned to an active role in this multimodal utterance. He then said, we’ll do this exercise first (line 5). This utterance, beginning with an inclusive pronoun we, also constructs the students as subjective participants (Young & Nguyen, 2002) in the class discourse.

After that, the teacher initiated a question and answer sequence (lines 8-22). He began the sequence with two questions. With the first one (what do you call this in English, line 8), he indicated the referent of the deictic pronoun this by pointing to the picture of soft drink bottles on the slide (Picture 4.3). With the second question (do you use the word soda, pop, coke, or soft drink, line 9), he made the students’ task easier, and thus scaffolded the task, by telling them to choose from the four options. These two questions were followed by an imperative form (raise your hand if ..., line 11)—a typical form of instruction used in classrooms. Responding to the embodied questions, thus aligning to the teacher-initiated sequence, the students indicated their answers by raising, or not raising, their hands. While no students raised their hands for the option of soda (line 13, Picture 4.5), five students raised their hands for pop (line 17, Picture 4.6). The expressions coke and soft drink were chosen by four students and two students, respectively (lines 20 and 22). The repetition of this question and answer sequence indexes what kind of English the students have learned and makes the variation visible in the classroom. Having observed the variation, the teacher said interesting, so can be kind of split (line 23) and made small motions with his palms as
if he were touching patches of invisible regions that were spread in space (Picture 4.7)—a multimodal utterance which made the conceptual *split* perceptually salient.

In Excerpt 4.7, which immediately follows Excerpt 4.6, the teacher used the variation observed in class and a color-coded map to introduce the sociolinguistic term *isogloss*.

Excerpt 4.7 Isogloss (Part 2)—Connecting the observed variation and the target term

25  T: *this is one of those vocabulary that actually is regionally separated*

26  ((moves RH and LH vertically as if separating something)) in in in in

27  ((changes the slides and shows Slide 3 [Figure 7])) American English

28  actually. ((moves LH over the map)) and *the blue is pop*, so a lot of

29  people ((moves LH over an area colored in blue on the map [Picture 4.8])) including (xx) Canada ((holds LH on Canada on the map)) we

*Picture 4.8. The teacher moves his left hand over an area colored in blue on the map.*

31  use pop a lot (xx). uh *the interesting one is green* ((moves LH over

32  an area colored in green [Picture 4.9])) *which is coke*. uh: if you go to
the south of the United States when they wanna drink (xx) any drink
that has bubbles in it they will call it (x) coke. even if it’s not coca
 cola. ((crosses his index fingers)) (xx) I wanna have coke. no no the
 orange one ((makes a pointing gesture)) ((slight laughter))
Ss: ((slight laughter))
T: you know coke! and it’s confusing for people (because xxx) coke is
 must be coca cola.
Ss: ((laughter))
T: but it’s a dialect. (xxx). ((turns to the screen)) if you said soda, you are
 (more) the western(s) or California ((points to the western side of the
 map)) (and) eastern(x) actually (xx) ((points to the eastern side of the
 map)) (xx) go to New York (you might) people say I wanna soda. uh:
 ((looks at the map)) and then soft drink, kind of yellow it’s kind of in
 a (xxx) ((moves LH over an area colored in yellow [Picture 4.10], and
The teacher moves his left hand over an area colored in yellow. These changes slides) these are sometimes called glosses by the way. Those lines that separate ((makes diagonal movements with RH [Picture 4.11]) uh: (xxx) if I know that usually (xx example xx) uh yeah

The teacher makes diagonal movements with his right hand.

let’s go back to this one. ((shows Slide 1 [Figure 5] again)) here we go. it’s right here. the word **isogloss**, ((points to isogloss written on Slide 1 [Picture 4.12])) (again) **gloss means language iso in this case**

**means border.**
The teacher points to the term *isogloss* written on Slide 1.

(Lesson 13, May 28)

After pointing out that there is a variation in the way *soft drink* is called by the students in class (*kind of split* in line 23, Excerpt 4.6), the teacher presented an exposition of a key idea in speech (*this is one of those vocabulary that actually is regionally separated in American English*, line 25). He then showed a color-coded map on the screen, which visually represented how names for *soft drink* vary in North
America (Slide 3 in Figure 7), and gave an extended explanation. First, he said the blue is pop (line 28), and elaborated on it (so a lot of people including xx Canada we use pop a lot in line 28) while gesturally indicating a region where the term is used on the map [Picture 4.8]. In this utterance, the propositional content was represented across several modes: the speech tied a name for soft drink to a color on the map (the blue is pop) and added details (so a lot of people including xx Canada we use a pop a lot); the hand movement gesturally specified the region on the map; and the map showed the location of the region. Next, he said the interesting one is green (line 31) and humorously enacted a scene where the use of the word coke creates confusion among people (lines 32-39). This part of his explanation was highly multimodal. He used: (1) the first-person pronoun I which referred to a hypothetical character he was acting out (line 35), (2) informal speech, as indicated by the contracted form wanna (line 35)—a colloquial style often observed in impromptu lectures (Hyland, 2009), (3) a pointing gesture (line 36), (4) a dramatic tone of voice (You know coke!, line 38), and (5) laughter (line 36). After explaining two more words (soda, soft drink) in lines 41-46, he finally introduced the term isogloss in speech and writing (line 51, Picture 4.12) and thus connected the linguistic variations observed in class and on the map and the abstract sociolinguistic concept denoted by the term. Furthermore, he immediately provided meaning of each part of the term using non-academic, common language (gloss means language, iso in this case means border, line 52).

According to Escobar Urmeneta and Evnitskaya (2014), multimodal explanations enhance students’ comprehension because such explanations facilitate mediation of dense content (Gajo, 2007). In the above excerpt, it is likely that the
Abstract disciplinary concept levelling was made accessible to the students through the teacher’s multimodal explanations. From the sociocognitive perspective, it can be considered that the teacher dynamically structured the classroom environment to aid the students’ alignment with the disciplinary concept. More specifically, by making the linguistic variation among the students concerning soft drink visible (Excerpt 4.6), he constructed a shared cognitive foundation in class on which he could build his next pedagogical action (i.e., to show the color-coded map). Having experientially observed the linguistic variation through the question-and-answer sequence, it is likely that the students could comprehend the sociolinguistic knowledge represented on the map more easily than having to interpret it without any preparatory scaffolding. Moreover, the use of the map helped the teacher create public cognitive space where linguistic and geographical information was made concrete and visible, thus enabling him to manipulate the information verbally and gesturally in order to facilitate the students’ alignment with it. Such sociocognitive functions of the map seem to be similar to the findings in Atkinson et al. (2007) and Goodwin (2013), both in which human tools (i.e., a grammar worksheet for an English learner, a Munsell chart for archaeologists, respectively) were reported to have contributed to a novice’s understanding by providing interactants with semiotic resources to build subsequent action upon and therefore affording public cognitive space for further semiotic work.

In addition, in Excerpt 4.7, the teacher’s dramatic acting to illustrate the regionally distinctive use of the word coke is likely to have had “emotional appeal” (Young & Nguyen, 2002, p. 355) to the students and have reduced the distance between the propositional content and them. In fact, the students promptly reacted to
the humorous explanation by joining the teacher’s laughter (lines 37 and 40), which suggests their increased alignment to the teacher’s explanation. The process in which a teacher’s humorous explanation facilitated students’ alignment with a target explanandum has been also reported in Nishino’s (2017) study on an EFL classroom.

The discourse moves by the teacher in Excerpts 4.6 and 4.7 are summarized below.

1. **EXEMPLIFICATION**: The teacher presents a specific, student-oriented example.
2. **QUESTION AND ANSWER**: The teacher makes linguistic variation among students visible through a question-and-answer sequence.
3. **EVALUATION**: The teacher gives a brief evaluation.
4. **EXPOSITION**: The teacher presents target domain knowledge.
5. **ELABORATION**: The teacher elaborates on the target domain knowledge through an extended, multimodal explanation.
6. **KEY DISCIPLINARY TERM**: The teacher presents a key disciplinary term which denotes the target domain knowledge.
7. **CODE GLOSS**: The teacher provides meaning of each part of the key disciplinary term in everyday language.

First, he presented the specific example of *soft drink*, which is likely to reflect the addressee-orientation of explanation (Dalton-Puffer, 2007; Gaulmyn, 1986). Through the subsequent question-answer sequence, he enacted a sociolinguistic survey and made the linguistic variation among the students visible in the classroom. After giving a brief evaluative comment (*interesting, so can be kind of split* in line 23, Excerpt 4.6),
he then presented an exposition (*this is one of those vocabulary that actually is regionally separated*, line 25, Excerpt 4.7) and elaborated on it through multimodal explanation. After that, he finally presented the target term *isogloss* (line 51, Excerpt 4.7) and immediately made the meaning available through a code gloss—a metadiscourse resource which supplies additional information by rephrasing or elaborating on what has been said (Hyland, 2005). These discourse moves were accomplished by the teacher’s coordinated and dynamic use of diverse semiotic resources such as speech, slides, the map, gesture, and nonlinguistic vocal behavior (e.g., vocal emphasis, tone of voice, laughter) as shown in Table 13. Such discourse practice suggests that a teacher explanation in which a specific example is transformed into abstract disciplinary knowledge might be a very complex process involving repeated reformulations of propositional knowledge (e.g., a dense disciplinary concept represented in academic language, reformulated content knowledge represented in everyday language).

| Table 13. Discursive Resources Used for Transforming an Example into Disciplinary Knowledge (Teacher) |
|**Excerpt 4.6 (A sociolinguistic survey)** | **Excerpt 4.7 (Isogloss)** |
| Metadiscourse resources  |  |
| *you*  | *you*  |
| *I*  | *I* (hypothetical)  |
| *we* (inclusive)  | *we* (non-inclusive)  |
| Interactional resources  |  |
| Questions, turn taking  |  |
| Nonverbal resources  |  |
| Body orientation, gaze, gesture  | gesture, vocal emphasis, tone of voice, laughter  |
| Tools  |  |
| Slide (picture and written text)  | Slide (color-coded map, written text)  |
In sum, both the textbook author and the teacher used specific examples to introduce disciplinary knowledge. The examples of the phone call and soft drink are likely to have allowed new academic knowledge to be introduced in a familiar context, in which learners were discursively constructed as subjective participants (Young & Nguyen, 2002). Considering that new knowledge is more likely to be noticed when embedded in a familiar context (van Lier, 1996), it can be said that explanations where contextualized examples are transformed into abstract disciplinary claims are effective pedagogical strategies to promote students’ alignment to sociolinguistic knowledge. This means that novice students, in turn, need to learn discourse skills to connect specific examples with decontextualized disciplinary knowledge.

**Unpacking Disciplinary Knowledge**

In the instructional discourse of the sociolinguistics course, there were instances where explanation sequences did not begin with contextualized examples. In such cases, discipline-specific terms or concepts were presented first and then the meaning was explained for students. Because academic knowledge is often represented with technical terms and nominalized phrases (Biber, 2006; Young & Nguyen, 2002), it is an important role of textbook authors and teachers to make the condensed meaning accessible to, or unpack (Young & Nguyen, 2002) the meaning for, the readers/students. In this section, I examine how disciplinary knowledge was made accessible through explanation sequences in the instructional discourse of the sociolinguistics course.
In the sociolinguistics course, there were two patterns of explanations in which sociolinguistic knowledge was unpacked. One is a pattern in which the meaning of a disciplinary term was immediately supplied through a code gloss (Hyland, 2005). In this pattern of explanations, a code gloss was embedded in an ongoing explanation sequence at a larger level, and the textbook author and the teacher wove the code gloss into the explanation without interfering with its flow. The following excerpts are instances of code glosses observed in the textbook (Holmes, 2013).

Excerpt 4.8 Code gloss: Sound spectrograph (Textbook)

There are infinite sources of variation in speech. A sound spectrograph, a machine which represents the sound waves of speech in visual form, shows that even a single vowel may be pronounced in hundreds of minutely different ways, most of which listeners do not even register. Some features of speech, however, are shared by groups, and become important because they differentiate one group from another. (p. 131)

Excerpt 4.9 Code gloss: Geordies (Textbook)

This conversation between two Geordies (people from Tyneside in England) is likely to perplex many English speakers. The double modal might could is also typical Tyneside, though also used in Scotland, as is the vocabulary item disjasket, meaning ‘worn out’ or ‘completely reined’. (p. 134)
Excerpt 4.10 Code glosses: Trapezium, variants (Textbook)

Standard English is more accommodating than RP and allows for some variation within its boundaries. This is represented in figure 6.3 by the flat top of the trapezium or table-topped mountain. The flat top symbolizes the broader range of variants (alternative linguistic forms) which qualify as part of the standard dialect of English in any country. (pp. 140-141)

Excerpt 4.11 Code gloss: Diphthongs (Textbook)

In New Zealand, a survey of 141 people living in the South Island distinguished three different social groups on the basis of the way speakers pronounced the diphthongs (gliding vowels) in words such as boat, bite, and bout. Four points on a scale were used to measure the different pronunciations. (p. 149)

These excerpts illustrate that the author provides code glosses using metadiscourse and linguistic resources. In Excerpt 4.8, a sound spectrograph is glossed with a superordinate term (i.e., a machine) and a specifying feature (i.e., represents the sound waves of speech in visual form) formed as a relative clause—a linguistic form employed for a definition (Dalton-Puffer, 2007)—and the code gloss is signaled by commas. In Excerpt 4.9, a definition of Geordies is realized as a noun phrase containing a superordinate term (i.e., people) and a specifying feature (i.e., from Tyneside in England), and is signaled by parentheses. In Excerpts 4.10 and 4.11, the terms trapezium, variants, and diphthongs are paraphrased in less academic language,
which is realized with a combination of adjectives (i.e., *table-topped, alternative linguistic, gliding*) and nouns (i.e., *mountain, forms, vowels*). These code glosses are signaled with a conjunction *or* and parentheses, which are metadiscourse markers of code glosses (Hyland, 2005).

In class, similar instances of code glosses were found in teacher talk.

**Excerpt 4.12 Code gloss: Intelligibility (Teacher)**

T: ((points to a slide)) the traditional linguistic way of deciding is (x) focus on mutual *<intelligibility*>. ((slightly leans forward)) intelligibility *means* understanding. ((points to the slide again)) in *in other words*, if you can understand what someone is saying to you and they can understand you, we can say that you are both speaking dialects of the same language. (Lesson 14, June 2)

**Excerpt 4.13 Code gloss: Micro (Teacher)**

T: micro-perspective is essentially *means* focus on one or two linguistic (things). micro *means* small, right? ((holds hands in from of chest, moves them close to each other [Picture 4.13])) (x) use a microscope ((mimics the movement of using a microscope)) and (x) focus (something) and the idea is that social dialects are really really complicated.
Two points can be made about the above excerpts. First, the code glosses were signaled by metadiscourse markers in teacher talk too. In Excerpts 4.12 and 4.13, the teacher paraphrased academic terms (i.e., *intelligibility, micro*) using synonyms in everyday language (i.e., *understanding, small*), and these paraphrases were accompanied by a metadiscourse marker *means*, which was also used in his explanation on *isogloss* (*gloss means language iso in this case mean border* in line 52, Excerpt 4.7). In Excerpt 4.12, he used another metadiscourse marker *in other words*, which signals a code gloss (Hyland, 2005), and provided an extended explanation of what it means for dialects to be mutually intelligible. Second, these code glosses were also signaled using multimodal resources. In Excerpt 4.12, as he said *intelligibility*, the teacher slowed down his speech and slightly leaned forward. Such vocal and postural emphasis is likely to draw students’ attention to the target lexical item. In addition, while uttering the word *understanding*, he pointed to the term *intelligibility* shown on the slide, thus tying the visually presented explanandum and the orally presented
explanation. In Excerpt 4.13, as he said *small*, he gesturally represented smallness by holding his hands in front of his chest and moving them close to each other (Picture 4.13). As observed in Escobar Urmeneta and Evnitskaya (2014), such joint use of multimodal resources enables the speaker to enhance meaning expressed in speech. In sociocognitive terms, it can be said that the teacher’s coordinated use of multimodal resources is likely to help the students align with the academic terms (i.e., intelligibility, micro) as reported in Nishino’s (2017) analysis of an experienced EFL teacher’s teaching practice.

The instances of code glosses illustrate that the instructional discourse of the textbook and the lessons is carefully crafted to make the meaning of propositional content comprehensible for novice learners. Although each instance is relatively brief, various semiotic resources were used in these instances (See Table 14). Both the textbook author and the teacher used linguistic and metadiscourse resources as listed in Table 14, and the teacher also used nonverbal resources such as vocal behavior, body movement, and gesture.

| Table 14. *Semiotic Resources Used for Code Glosses* |
|-----------------------------------------|-----------------|
| **Textbook**                             | **Teacher**     |
| Linguistic resources                     | Linguistic resources |
| Relative pronoun, adjective + noun;     | Synonyms        |
| Non(less) academic language              | Non-academic language |
| Metadiscourse markers                    | Metadiscourse markers |
| A, B,                                   | A means B, in other words |
| A (B)                                    |                 |
| A or B                                   | Nonverbal resources |
|                                         | Vocal behavior (slow speech), body movement, gesture |
The other pattern in which disciplinary knowledge was unpacked (Young & Nguyen, 2002) in the textbook and the lessons is extended explanation sequences where meaning of propositional claims was elaborated through contextualized examples. Excerpt 4.14, a paragraph on regional dialects in the textbook, begins with a claim followed by two examples. The excerpt illustrates how decontextualized disciplinary knowledge is transformed into contextualized examples by the author’s selective use of linguistic and metadiscourse resources.

Excerpt 4.14 Exemplification: Regional variation 1 (Textbook)

[1] Sometimes the differences between dialects are a matter of the frequencies with which particular features occur, rather than completely different ways of saying things. [2] People in Montreal, for example, do not always pronounce the l in phrases like il pleut and il fait. [3] Parisians omit the l too – but less often. [4] If you learned French in school you probably struggled to learn which verbs used avoir and which used être in marking the perfect aspect. [5] Getting control of these patterns generally causes all kinds of headaches. [6] It would probably have caused you even more pain if you had realised that the patterns for using avoir and être are different in Montreal and Paris. (p. 134)

In Sentence 1, the author presents a propositional claim about differences between dialects: Sometimes the differences between dialects are a matter of the frequencies with which particular features occur, rather than completely different ways of saying things. Some readers might find the content of the claim difficult to comprehend because the sentence, especially the first half, is constructed with noun phrases
denoting abstract entities such as *frequencies* and *particular features* and has no reference to a specific context. In the second half of the sentence, the author adds meaning by clarifying what the differences of dialects are not—a discourse strategy to explain a target concept by illustrating its variation (Dalton-Puffer, 2007; Lemke, 1990). The content of the claim is then elaborated through two contextualized examples. In Sentences 2 and 3, she describes different frequencies at which French speakers in Montreal and Paris pronounce *l*. This first example, signaled by a metadiscourse marker *for example*, is constructed with third person subjects *people in Montreal* and *Parisians*, and is embedded in a specific context. In Sentences 4 and 6, she gives another example from the French language focusing on different patterns in which *avoir* and *être* are used in Montreal and Paris. In this second example, while the same situational context is kept, she uses the second person pronoun *you* and places readers in the center of the hypothetical situation. Thus, it can be said that by changing linguistic resources to use, the author gradually transformed the abstract claim into specific examples, and rhetorically situated readers as subjective participants (Young & Nguyen, 2002) in the phenomenon depicted in the example. The discourse moves in Excerpt 4.14 are summarized below.

1. **EXPOSITION:** The author presents a key disciplinary idea.
2. **EXEMPLIFICATION 1:** The author provides an example. (third person)
3. **EXEMPLIFICATION 2:** The author provides an example. (second person)

A similar explanatory sequence can be found in Excerpt 4.15, taken from another paragraph on regional dialects. The excerpt shows the first half of the paragraph.
Excerpt 4.15 Exemplification: Regional variation 2a (Textbook)

[1] Regional variation takes time to develop. [2] British and US English, for instance, provide much more evidence of regional variation than New Zealand or Australian English. [3] Dialectologists can distinguish regional varieties for almost every English county, e.g., Yorkshire, Lancashire, Northumberland, Somerset, Cornwall and so on, and for many towns too. (p. 134)

This paragraph begins with a propositional claim about the development of regional dialects, and its content is unpacked over three paragraphs. First, the propositional claim is presented in Sentence 1, with no reference to a specific context (Regional variation takes time to develop). The claim is then contextualized through an example of the English language, which is signaled by a metadiscourse marker for instance (British and US English, for instance, provide much more evidence of regional variation than New Zealand or Australian English, Sentence 2). In addition, in Sentence 3, the example is elaborated on further with more details about regional varieties in English (Dialectologists can distinguish regional varieties for almost every English county, e.g., Yorkshire, Lancashire, Northumberland, ...). This sentence is constructed differently from the first two sentences: While the subjects are inanimate nouns in Sentences 1 and 2 (regional variation, British and US English), it is an animate noun in Sentence 3 (dialectologists). As a result, the content of Sentence 3 is represented as an observable action by human participants. After more details about British dialects are given in this paragraph, two paragraphs, which are on American English and Australian and New Zealand English respectively, follow. Excerpts 4.16 and 4.17 are the first few sentences of these paragraphs.
Excerpt 4.16 Exemplification: Regional variation 2b (Textbook)

[1] In the USA, too, dialectologists can identify distinguishing features of the speech of people from different regions. [2] Northern, Midland and Southern are the main divisions, and within those three areas a number of further divisions can be made. (p. 135)

Excerpt 4.17 Exemplification: Regional variation 2c (Textbook)

[1] In areas where English has been introduced more recently, such as Australia and New Zealand, there seems to be less regional variation—though there is evidence of social variation. [2] The high level of intra-national communication, together with the relatively small populations, may have inhibited the development of marked regional differences in these countries. [3] In New Zealand, for instance, ... (p. 135)

In Excerpt 4.16, Sentence 1 contains the same animate noun subject dialectologists as in Sentence 3 of Excerpt 4.15 and represents its content as an action. In Excerpt 4.17, although the first sentence contains no human participants, specific examples are provided in the rest of the paragraph.

Table 15 shows a summary of semiotic resources used in the textbook for unpacking disciplinary knowledge through exemplification. As shown in Table 15, there is a general pattern in the use of semiotic resources. Propositional claims, or expositions, tend to be constructed using noun phrases and inanimate noun subjects typical of academic language (Biber, 2006). The claims are then gradually transformed
into contextualized examples by the use of human participants, non-academic lexicon, and concrete situations. This discourse practice allows the author to represent propositional content as dynamic action and to reduce the distance between academic knowledge and readers. In other words, the author helps the readers gradually align with propositional content by shifting semiotic resources to use.

Table 15. *Semiotic Resources Used for Exemplification (Textbook)*

<table>
<thead>
<tr>
<th></th>
<th>Exposition</th>
<th>Exemplification 1</th>
<th>Exemplification 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Linguistic</strong></td>
<td>Noun phrases; Inanimate subjects the difference, regional variation; Copula are</td>
<td>Third person subjects people in Montreal, Parisians; Inanimate subject British and US English</td>
<td>Second person pronoun you; Animate noun subject dialectologists</td>
</tr>
<tr>
<td><strong>Metadiscourse</strong></td>
<td>for example, for instance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There is one more point to be made about discourse practices in the textbook concerning the author’s interaction with readers. Textbook authors cannot interact with readers as teachers interact with students in the classroom; however, Holmes occasionally addressed readers using a second person pronoun *you* as observed in Excerpts 4.5 and 4.14. This discourse practice was also observed in other parts of the main text in the chapter. In addition, the use of *you* was identified in all eight exercises in the chapter. For instance, Holmes gave directions formulated as questions containing *you* (e.g., *Can you guess what the following words and phrases mean?*, *Can you produce a list of words for your speech community that divides people up*.
according to their social background?). Although the use of you has an effect of signaling that the author is a knower (Hyland, 1999), considering the context of its use, examples and exercises, it can be assumed that its primary functions are to discursively construct readers as participants of sociolinguistic phenomena and to encourage them to gain first-hand experience in studying sociolinguistic data in the real world. Thus, it can be argued that this practice by Holmes functions as affordance for introductory-level readers to participate in disciplinary discourse.

Similar extended explanations of disciplinary concepts were observed in the lessons. Excerpts 4.18 and 4.19, taken from Lesson 14, illustrate how the teacher used multimodal resources to explain the concept of levelling of dialects through exemplification. Immediately before Excerpt 4.18, the teacher finished talking about lexical differences among English-speaking countries. He then changed the slides. The next slide was titled Levelling of dialects, and the key term levelling was highlighted in blue (Slide 4 in Figure 8).
Excerpt 4.18 Exemplification: Leveling a dialect (Part 1)

1 T: ((Slide 4 is shown on the screen)) there’s an interesting concept in the book called levelling. ((points to Slide 4 [Picture 4.14])) uh: (0.8)

![Picture 4.14. The teacher points to Slide 4.]

leveling (x world) of dialects actually i- in your own words does anybody know what levelling means ((draws a circle around the word Levelling on Slide 4)) if I level something? ((moves RH horizontally from the left to the right [Picture 4.15], and looks around the class))

![Picture 4.15. The teacher moves his right hand horizontally from the left to the right.]

3 Ss: (4.5) ((The teacher looks around the class.))

7 T: ((turns to the board)) if you if you (xxx) if you are a farmer sometimes
((draws a zigzag line on the board [Picture 4.16])) what you might

*Picture 4.16. The teacher draws a zigzag line on the board.*

wanna do is take a bulldozer (x) someone driving ((draws a picture of a bulldozer and a driver)). and **bulldozers are one of those big trucks**

that will push ((shows a pushing movement with hands)) (xx) you wanna push (x) because this is not this is not straight. so what you wanna do is (x) **you** wanna make it straight. so **you** wanna make it level. ((writes on the board *Level*) **level means straight.** (x) **level something means to get rid of the differences.** ((moves RA horizontally from the left to the right again [Picture 4.17])) uh: so

*Picture 4.17. The teacher moves his right hand horizontally from the left to the right.*
leveling is ((points to the word Levelling on Slide 4)) when actually in the world of sociolinguistics leveling a dialect means that dialects start to disappear. The different dialects start to disappear.

(Lesson 14, June 2)

Figure 8. Slide 4 (Lesson 14, Dialects).

At the beginning of Excerpt 4.18, the teacher presented the key disciplinary term *levelling* in speech (*there’s an interesting concept in the book called levelling*, line 1) and with a pointing gesture (Picture 4.14), which tied his speech with text information on the slide. Although he then appeared to explain the concept himself, he asked students a question instead: *In your own words, does anybody know what levelling means? If I level something* (line 3). This question consists of two parts, in each of which the teacher drew on different linguistic resources. First, he used the second person pronoun *your*, a question, and the gerund *levelling* (*In your own words, does anybody know what levelling means?*, line 3). The combination of *your* and a question
allowed him to invite the students into the class discourse, and yet, in this first part, the target concept was expressed as a gerund (*levelling*) involving no context or human actor. In the second part, he reformulated the gerund into a verb phrase *level something* and added the first-person subject *I*. As a result, the concept of *levelling* was presented as an action involving a human participant (*I level something*). Moreover, he simultaneously expressed the meaning of *level* with a horizontal movement of his hand (Picture 4.15). This reformulated question, however, earned no instant verbal responses from the students (line 7). In the 4.5-second pause, as the teacher looked around the class, some students kept their gaze toward the teacher, and other students looked at their textbook, notebook, or device. The absence of contributions by the students in this part might support the finding in previous CLIL research that student explanations tend to be minimal in teacher-led whole class discussions (Dalton-Puffer, 2007; Llinares & Morton, 2010). However, it seems that the absence of contributions might have been anticipated by the teacher, or was not regarded as a dispreferred response which would require further scaffolding of the question, considering his smooth transition to an extended explanation (line 8). While it was often observed that he scaffolded his questions further until he obtained an answer in other cases (e.g., a review activity), it seems that the teacher question (lines 3-5) functioned as a pedagogical device to “drive the talk forward” (Dalton-Puffer, 2007, p. 123) in this sequence.

In line 8, the teacher initiated an extended multimodal explanation sequence. As he said *if you are a farmer*, he drew a zigzag line on the board to represent unleveled ground (Picture 4.16). He also drew pictures of a bulldozer and a driver,
gave a definition of a bulldozer in speech (*bulldozers are one of those big trucks that will push*, line 11), and made a pushing movement with his hands that gesturally indicated a movement of a bulldozer. The teacher’s action in this part illustrates how he dynamically changed the classroom environment to adapt it to his ongoing explanation, that is, by drawing the zigzag line and pictures, he generated new semiotic resources to aid the students’ comprehension. Using the drawings, speech, and gesture, he exemplified the meaning of the term level in a specific context (*if you are*) and with a human actor (*a farmer*)—another instance of multimodal explanation, which is likely to facilitate the students’ understanding of dense content (Escobar Urmeneta & Evnitskaya, 2014; Gajo, 2007). Moreover, in this example, the students were constructed as subjective participants (Young & Nguyen, 2002) in the hypothetical situation by the teacher’s repeated use of *you* (*if you are a farmer, what you might wanna do is, you wanna push, you wanna make it straight, you wanna make it level*). The teacher then clarified the disciplinary meaning of the concept *levelling* in three steps. First, he presented a synonym of the word *level* in speech (*level means straight*, line 15). Second, he gave the meaning of a verb phrase *level something* in speech (*level something means to get rid of the differences*, line 15) along with a gesture (Picture 4.17). Finally, as he pointed to the term on the slide again, he clarified in a full sentence the field-specific meaning of the concept *levelling a dialect* (*In the world of sociolinguistics levelling a dialect means that dialects start to disappear. The different dialects start to disappear*, line 19).
In Excerpt 4.19, which directly follows Excerpt 4.18, the field-specific meaning of *levelling* was elaborated on further through an example of Tokyo and Osaka dialects.

Excerpt 4.19 Exemplification: Leveling a dialect (Part 2)

22 T: so there’s (the) concept ((points to the word *Levelling* on Slide 4 for a moment and turns back to class)) especially this is a link a little bit maybe to globalization but uh: the idea that over time maybe people start to talk bit more like each other because some of those old reasons are disappearing. **remember we said geographic distance.**

25 maybe between Osaka and Tokyo **for example.** five hundred kilometers two hundred years ago ((extends RA to the back of the shoulder [Picture 4.18])) was a big distance. hasn’t changed but nowadays (x) just takes two hours to go between the two cities. so the barriers are smaller ((brings RH and LH together in front of chest)). A

*Picture 4.18.* The teacher extends his right arm to the back of his shoulder.
big mountain? (yeah) no problem nowadays, big ocean (yeah) no problem we have airplanes. uh so some of those things are making the world maybe (kind of) contact each other (xxx dialect xxx.) ((turns to the screen)) **Levelling involves the reduction of dialect and or accent variation, and the rapid spread of standard variety.**

((places LH on Slide 4 as he reads out the sentence [Picture 4.19]))

*Picture 4.19. The teacher places his left hand on Slide 4 as he reads out the sentence.*

38 so **in other words** everyone starts to speak the same way more. ((writes the paraphrase on the board))

(Lesson 14, June 2)

At the beginning of Excerpt 4.19, the teacher reconfirmed the topic under discussion, the concept of *levelling*, in speech and by pointing at the term on Slide 4 (Figure 8). He then mentioned a link to globalization (line 24), and began to elaborate on the concept. He said, *over time maybe people start to talk bit more like each other because some of those old reasons are disappearing* (line 24)—an utterance in which the target
phenomenon was expressed as an action by human actors (*people*). The topic of Tokyo and Osaka dialects had been discussed in class earlier in this lesson; thus, the teacher’s utterance *remember we said geographic distance* is likely to signal his reuse of the shared knowledge. In this part of the explanation, the content of the example was communicated through multimodal resources including: (1) speech, (2) vocal emphasis (*big*, line 29), (3) hand movement (Picture 4.18), which seems to be a metaphoric gesture (McNeill, 1992) representing the past, and (4) an iconic gesture representing smallness (line 31). Such coordinated use of multimodal resources allows the teacher to enact the process of levelling in a Japanese context, which seems to reflect the addressee-orientation of explanation (Dalton-Puffer, 2007; Gaulmyn, 1986). Moreover, it should be noted that he also used an inclusive pronoun *we* (lines 26, 33), creating a sense of *joint agency* (Ogborn et al., 1996) in the class discourse.

Finally, the teacher turned to the screen and read a sentence written on Slide 4 aloud: *Levelling involves the reduction of dialect and or accent variation, and the rapid spread of standard variety* (line 35). This exposition is made up with an inanimate noun subject (*levelling*) and nominalized phrases (e.g., *reduction of dialect, accent variation, rapid spread*), which are features of academic language (Biber, 2006). After that, the teacher immediately provided a paraphrase and thus clarified the meaning by reformulating the exposition using an animate subject and an unnominalized verb phrase (*everyone starts to speak the same way more*, line 38). This reformulated utterance was also signaled by a discourse marker *in other words* (line 38).
The discursive moves by the teacher in Excerpts 4.18 and 4.19 are summarized below.

1. **KEY DISCIPLINARY TERM**: The teacher presents a key disciplinary term.

2. **QUESTION**: The teacher asks the students a question.

3. **EXEMPLIFICATION 1 (hypothetical context)**: The teacher exemplifies the meaning of the key term in a hypothetical context in which students are constructed as active participants.

4. **CODE GLOSS**: The teacher provides a synonym, a definition, and the field-specific meaning of the key term.

5. **EXEMPLIFICATION 2 (Japanese context)**: The teacher exemplifies the field-specific meaning by applying the concept to a Japanese context.

6. **EXPOSITION**: The teacher presents target domain knowledge in academic language.

7. **CLARIFICATION**: The teacher clarifies the exposition by paraphrasing it in everyday language.

First, the teacher presented the key disciplinary term *levelling*, and asked the students if they knew the word. Having earned no immediate response, he initiated an extended explanation, in which the meaning of *levelling* was exemplified in a hypothetical context. After that, a synonym, a definition, and the field-specific meaning of *levelling* were presented. He then provided another example, in which the concept of *levelling* was applied to a Japanese context, followed by an explicit exposition of the target domain knowledge and its paraphrase. It appears that the teacher explanation observed in Excerpts 4.18 and 4.19 is a complex process involving multiple exemplifications.
situated in different contexts, repeated clarification, and interaction with students, all of which are realized by the coordinated use of diverse semiotic resources. Table 16 shows a summary of such semiotic resources.

Table 16. *Semiotic Resources Used for Exemplification (Teacher)*

<table>
<thead>
<tr>
<th>Key disciplinary term</th>
<th>Linguistic resources</th>
<th>Nonverbal resources: Pointing gesture</th>
<th>Tool: Slide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question</td>
<td>Linguistic resources</td>
<td>Second person pronoun <em>you</em>, Gerund <em>levelling</em>; First-person subject <em>I</em> (hypothetical), Verb phrase <em>level something</em></td>
<td></td>
</tr>
<tr>
<td>Exemplification 1</td>
<td>Linguistic resources</td>
<td>Second person subject <em>you</em> (hypothetical), Repetition</td>
<td></td>
</tr>
<tr>
<td>(Levelling)</td>
<td>Metadiscourse marker: Hedge <em>might</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Code gloss</td>
<td>Metadiscourse marker: <em>A means B</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exemplification 2</td>
<td>Linguistic resources</td>
<td>Animate noun subject <em>people, we</em> (inclusive), <em>we</em> (hypothetical)</td>
<td></td>
</tr>
<tr>
<td>(Levelling of dialects)</td>
<td>Metadiscourse marker: <em>for example, Hedge might</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Exposition            | Linguistic resources | Inanimate noun subject *levelling*, Nominalized phrases  
(reduction of dialect, accent variation, rapid spread) |
| Clarification         | Linguistic resources | Animate noun subject *everyone*, Unnominalized verb phrase *starts to speak the same way*; |
|                       | Metadiscourse marker: *in other words* |
As in the case of the textbook explanations (Table 15), the exposition, which was constructed mainly with noun phrases, was transformed into contextualized examples by the use of human participants (e.g., you, we), expressions in non-academic lexicons (e.g., get rid of differences, a big difference, we have airplanes), hypothetical but concrete situations, and multimodal resources such as vocal emphasis, gestures, and drawings. Considering such discourse practice, it can be speculated that the students were repeatedly exposed to disciplinary knowledge represented at various degrees of abstraction through the cyclical process in which dense content was transformed into concrete examples.

**Summary**

In this chapter, I have reported the results of macro-level and micro-level analyses on instructional discourse in the sociolinguistics course to answer the first two research questions. Regarding the first research question *How are explanations of disciplinary knowledge organized in a course book?*, the analyses showed that textbook explanations of disciplinary knowledge are organized so that the scope of the discipline is clearly laid out for novice learners (i.e., to study the relationship between language and society), and the content is sequenced in a general order of saliency. Moreover, the textbook explanations are organized with various pedagogical elements such as examples, exercises, maps, and diagrams, which result in hybrid nature of the discourse. Concerning discourse practices in textbook explanations, it was observed that the author explicitly signaled the organization of the discourse using frame markers, transformed specific examples into generalizable claims by gradually
changing linguistic resources to use, and unpacked disciplinary knowledge by providing code glosses and examples, both of which were often signaled by metadiscourse markers. In doing so, she carefully navigated the readers through the text and occasionally constructed them as subjective participants (Young & Nguyen, 2002) while keeping her presence largely invisible in the explanations of propositional content.

With respect to the second research question How are explanations of disciplinary knowledge by the teacher organized and presented?, the analyses showed that the thematic organization of the lessons generally followed that of the textbook. The micro-level analysis indicated that the discourse practices similarly observed in the textbook explanations (i.e., explicit signaling of topic shifts, transforming specific examples into disciplinary knowledge, and unpacking disciplinary knowledge through exemplifications) were accomplished interreactionally in class. This would accord well with the finding of previous research (Dalton-Puffer, 2007; Nikula, 2010) that teaching tends to be dialogic in CLIL classrooms. In the teacher explanations, the students were repeatedly exposed to disciplinary knowledge represented at various degrees of abstraction. Moreover, the analysis also illustrated that the teacher dynamically changed the classroom environment to adapt it to his ongoing explanation (e.g., showing a color-coded map, drawing pictures), established public cognitive space in the classroom, and skillfully coordinated verbal and nonverbal resources as he explained dense content knowledge. Such multimodality is likely to facilitate the students’ alignment with the teacher explanations (Nishino, 2017). The instructional discourse examined in this chapter shaped a discursive context in which the students
engaged with disciplinary knowledge in the sociolinguistics course. In the next chapter, I examine student discourse in group work.
CHAPTER 5

STUDENTS’ DISCOURSE IN GROUP WORK

In terms of academic development, learners need to be able to talk about the concepts required with their teachers and peers, to participate in conversations about the issues, before they can be expected to apply the concepts and the modes of reasoning in literate products. (van Lier, 2004, p.161, italics in the original)

The purpose of this chapter is to investigate students’ discourse in group work during the sociolinguistics research project. As van Lier (2004) argued, in order for students to gain competence in academic discourse, interacting with teachers and peers on target matters is important because, in doing so, they develop the repertoires of participation in academic discourse. In the sociolinguistics course, in addition to being exposed to the instructional discourse examined in Chapter 4, the students had opportunities to participate in conversations regarding disciplinary knowledge as they carried out the group research project. During group work, the students were observed to repeatedly discuss their research topic with group members. Such interactions during group work are important to this study because they illustrate the processes in which students work with disciplinary knowledge. Thus, in this chapter, by analyzing students’ discourse in group work, I consider how they align to disciplinary knowledge provided in the textbook and in class, and other tools and affordances in their interactions with each other to form their explanations over time (Research Question 3a).
This chapter is divided into two sections. First, I analyze the students’ interactions in intra-group discussions in which they generated ideas about their research topic through frequent turn-taking. Second, because there were explanation sequences about disciplinary knowledge produced by the students during group work, I analyze such instances of explanations. As a whole, these two sections show the situated and cumulative processes in which the students developed a conceptual understanding of target matters and worked out explanations about their disciplinary knowledge. The overall organization of this chapter reflects the general progression of the students’ project work—the interactions with frequent turn-taking usually preceded the production of explanation sequences. However, priority was given to analytical categories rather than chronological units. This is due to challenges in presenting analyses of complex, nonlinear processes of learning, which are the nature of project work (Krajcik et al., 1998). In order to help the readers grasp the contexts of excerpts under discussion, I have included a description of the group’s project and progress when necessary.

**Conceptual Development in Intra-Group Discussions**

In intra-group discussions, the students used a wide variety of semiotic resources, that enabled them to participate in ongoing discussions and to represent developing content knowledge regarding their research topic (See Table 17 for focal student groups’ research topics). In the following, I examine the focal students’ interactions focusing on four aspects: varied interactional moves and syntactic reformulation, appropriation through reported speech, gestural alignment, and
environmentally coupled gestures. Although inevitably not comprehensive due to the richness of the students’ meaning-making activities, they illustrate important moment-to-moment processes whereby multimodal interactions in intra-group discussions led to conceptual development.

Table 17. Research Topics Chosen by Focal Groups

<table>
<thead>
<tr>
<th>Focal group</th>
<th>Student name</th>
<th>Research topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Emi, Fuyu, Sakura</td>
<td>Language Shift</td>
</tr>
<tr>
<td>2</td>
<td>Jun, Hiro</td>
<td>Japanized English</td>
</tr>
<tr>
<td>3</td>
<td>Wako, Momo</td>
<td>Impact of Gender in Japanese</td>
</tr>
</tbody>
</table>

Varied Interactional Moves and Syntactic Reformulation

The essential work of developing conceptual understanding was witnessed in the students’ early group work. One of the students’ first tasks after selecting a research topic was to submit a research proposal. In class, the teacher had explained the task using a template, which was made available to the students online, and a model proposal written by previous students (See Table 18 for the content of the template). This task created a context for the students to have conversations about their target topic and exchange ideas, which helped them to establish a conceptual foundation for advancing the project.

Table 18. Six Sections in the Template of the Research Proposal

<table>
<thead>
<tr>
<th>Section</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Team members</td>
</tr>
<tr>
<td>B</td>
<td>A research topic</td>
</tr>
<tr>
<td>C</td>
<td>The reason why you chose the topic</td>
</tr>
<tr>
<td>D</td>
<td>A specific question about the topic</td>
</tr>
<tr>
<td>E</td>
<td>An expected answer to the question</td>
</tr>
<tr>
<td>F</td>
<td>A list of resources in APA style</td>
</tr>
</tbody>
</table>
A few days before the day to submit the research proposal, Emi and Fuyu (Group 1) had their first meeting at a school cafeteria. In this meeting, they filled out the template, on which they and Sakura had individually written ideas by sharing it online as a Google document. Sakura could not attend the first meeting. At this point, their research topic was people’s code-switching behaviors, which they later rewrote as language shift. As seen in Picture 5.1, Emi and Fuyu sat at a table facing each other. As revealed in their interaction, Emi, who is from a northern part of Japan, has more experiential knowledge, or an increased awareness, about code switching than Fuyu, who is from a prefecture near Tokyo. At the edge of the table, they set their tablet computers, which were connected to the Internet. Their proposal in progress was displayed on Fuyu’s tablet screen, and Emi’s tablet was used to view the model proposal written by previous students. In addition, Fuyu’s textbook and Emi’s dictionary were also on the table. Although not included in the excerpt, they used the textbook and the dictionary in this meeting to check what they learned in class and a lexical item. As illustrated below, these items and Emi’s experiential knowledge functioned as important sociocognitive resources and tools that helped them align to each other and to disciplinary knowledge.
Excerpt 5.1 occurred towards the end of Emi and Fuyu’s 34-minute meeting. In this part of the meeting, their focus was on Section E. They were searching for an expected answer to their third research question, What social factors influence people’s code-switchings? They had agreed to write fear to immediately before Excerpt 5.1, and therefore the immediate goal of their interaction was to identify a noun to complete the noun phrase. This part of the discussion reveals how they collaboratively generated and iterated ideas through varied interactional moves in a shared cognitive space. It also shows how syntactic reformulation enabled Emi to elaborate on her intended meaning.

Excerpt 5.1 Fear of people (Group 1, Week 4)

1 F: °fear to Tokyo°
2 ((gazes at her tablet screen; in slightly small voice))
3 E: people in Tokyo toka? a:: people
((gazes forward [Picture 5.2]))

*like people in Tokyo? uh:: people*

*Picture 5.2. Fuyu’s gaze is on the screen while Emi gazes forward.*

6  F: [teka arejanai? a:: Tokyo de ii no
7   kana? soretomo (2.2) standaado Japan:zu
8   ((shifts gaze to E, E shifts gaze to F [Picture 5.3], then F shifts gaze to
9   her tablet screen))
10  *Well, isn’t it that? Ah, I wonder if Tokyo is okay. Or is it standard
11   Japanese*
Fuyu and Emi establish mutual gaze.

12 E: °standa:do no hou ga iikanaa° (xx)
13 Would standard be better
14 F: (xx) standa:do
15 E: °nani ni kanjiru ka dayo ne°
16 To what (we) feel (fear), right?
17 F: <hyo:jungo eno kyo:fu> (0.7) kyo:i?
18 ((shifts gaze to E))
19 Fear of standard language. Threat?
20 E: umm. hyo:jungo eno kyou:i dattara nande kaeruka tte kotoni nacchau
21 jan? demo are dayo ne. (yappa) hito ni kanjiten dayo ne=
22 ((shifts gaze to F, holds LH with palm pushing forward [Picture 5.4]))
23 Umm. If it’s threat from standard Japanese, it’s like why do (I)
24 switch, right? But it’s like (I) feel (fear) to people.
In Excerpt 5.1, Emi and Fuyu made varied interactional moves to advance their discussion. The process of the discussion can be divided into three phases, which are likely to correspond with the developmental stages of explanations (Woodruff & Meyer, 1997). These phases are marked by: the way they physically organized space between them (e.g., gaze, body orientation), and the use of other semiotic resources (e.g., L1, L2, syntactic structure, gesture). In the first phase (lines 1-5), Emi and Fuyu’s eyes did not meet—Emi’s gaze was oriented forward whereas Fuyu’s gaze was on her tablet screen (Picture 5.2), and their utterances were short and descriptive mainly consisting of candidate L2 noun phrases (fear to Tokyo, people in Tokyo). The divergent gaze and the content of the utterances suggest that their attention was largely being paid to their immediate task (i.e., to complete the noun phrase fear to) rather
than to each other. It can be considered that they needed to have their own cognitive space to generate ideas to contribute to the discussion. This does not mean, however, that they were working alone. They had an object of joint attention, i.e., the proposal writing task, or, more specifically, the noun phrase to complete (fear to). This participation structure indicates that they were engaging in triadic interaction (van Lier, 2002), where interactants work side by side with an object of joint attention. In triadic interaction, the object of joint attention plays a significant role in organizing the cognition of the interactants as observed in Nishino and Atkinson’s (2015) study on collaborative writing—two graduate students’ cognition was initiated and organized by the text that they were formulating together. In the case of Emi and Fuyu, they generated ideas as they engaged in the task. In other words, the task afforded and organized their cognitive activity, which, in turn, likely influenced their utterances. As noted above, their utterances in this phase mainly consisted of short L2 noun phrases (fear to Tokyo, people in Tokyo), with which they nominated their ideas as isolated entities. These utterances seem to accord well with van Lier’s (2002) argument that language in triadic interaction is lexically based and exploratory.

In the second phase (lines 6-14), there was a change in Emi and Fuyu’s gaze, body orientation, and language. Having been unable to reach a consensus in the first phase, Fuyu began to use the L1 (teka areja nai?) in line 6 and simultaneously shifted her gaze and body to Emi. This multimodal move earned the attention of Emi, who, in return, shifted her gaze to Fuyu (Picture 5.3). As a result, they established mutual gaze thus creating a more tightly shared cognitive space between them than in the first phase. While maintaining her gaze on Emi, Fuyu then expressed doubt on the choice
of the word *Tokyo* (*Tokyo de ii no kana?*) in line 6 and hesitantly nominated a new idea *standard Japanese* (*soretomo standaado Japanese*) in line 7. In line 12, Emi incorporated the word *standard* into her utterance and displayed her consideration of, or alignment with, Fuyu’s idea while sustaining agreement (*standaado no hou ga ii kanaa*). It should be noted here that Fuyu and Emi began to build their utterances upon each other’s in this phase (i.e., reusing a lexical item, assessing each other’s idea) and thus verbally aligned to each other.

Finally, in the third phase (lines 15-27), Emi and Fuyu engaged in an elaborate meaning-based discussion in the L1, where the relation between code-switching and contributing factors was explored more deeply. In line 15, Emi reframed the discussion and realigned to the task by clarifying the immediate goal of their interaction (*nani ni kanjiru ka dayo ne*, or To what we feel fear, right?). In line 17, Fuyu gave an answer to, thus aligned to, Emi’s question: *hyo:jungo eno kyo:fu, kyo:i?* (Fear from standard language. Threat?). In line 21, Emi nominated the same idea that she had proposed earlier (*people in Tokyo* in line 3). This time, however, the way she described it was much more extended and elaborated. First, she displayed disagreement against Fuyu’s idea by giving the reason and thus acknowledged Fuyu’s contribution: *hyo:jungo eno kyou:i dattara nande kaeruka tte kotonin nacchau jan?* (If it’s threat from standard Japanese, it’s like why do (I) switch, right?, line 20). She then said that the fear is felt to *hito* (people) with a vocal emphasis (*hito ni kanjiten dayo ne*). Note that the utterance was predicational whereas her earlier utterance had been formed as a noun phrase (*people in Tokyo* in line 3). This syntactic reformulation has a significant impact on how her idea was represented. In the noun phrase, even when it
is complete (i.e., fear of people in Tokyo), the presence of the person who feels the fear is not salient. However, in the reformulated utterance, the verb *kanjiru* (feel) signals the presence of the experiencer despite a lack of a subject in the sentence—a common practice in the Japanese language. In other words, the syntactic reformulation enabled Emi to make her intended meaning more accessible by representing the idea not as a decontextualized entity but as an action involving a subjective participant.

Considering similar discourse practice documented in teacher talk (Young & Nguyen, 2002)—a science teacher unpacked condensed meanings in a textbook and cast students in the role of subjective participants in the representation of light reflection, it can be assumed that such experiential representation of an idea could be understood by the interactant more easily. In fact, after Emi made this utterance, Fuyu expressed her understanding of Emi’s idea (*a:: naruhodo ne::*, line 25). Here, grammar was a resource for Emi to “creatively adapt language” for a larger communicative need (Ochs, Gonzales, & Jacoby, 1996, p. 360). Emi also ended the assertion with *ne*—a sentence-final particle used to direct a hearer’s acceptance (Saigo, 2011). From a sociocognitive perspective, the use of this *affective particle* (Nishino & Atkinson, 2015) is likely to indicate Emi’s emotional alignment to Fuyu. Moreover, while making this utterance, Emi made a pushing movement with her palm (Picture 5.4)—a key gesture in their interaction, which is taken up in the analysis of gestural alignment.

The above examination of Excerpt 5.1 reveals that Emi and Fuyu’s varied interactional moves (e.g., nomination, suspension of agreement, reframing, disagreement, elaboration) were afforded by their shifting use of semiotic resources as summarized in Figure 5. In the first phase (lines 1-5), they nominated candidate L2
noun phrases in triadic interaction. In the second phase (lines 6-14), they established mutual gaze and body orientation, and engaged in a meaning-based discussion in L1. Considering the flow of the discussion, securing the shared cognitive space seems to be an important preparatory step for the meaning-based discussion. In the third phase (lines 15-27), they made more varied moves than in the previous phases by speaking solely in the L1 and using gesture (e.g., reframing of the discussion, explicit disagreement, elaboration of ideas). In this process, the way their ideas were represented changed from descriptive to more relational one, that is, relations among concepts began to be addressed, which is a similar trajectory in the development of explanations observed by Woodruff and Meyer (1997).

<table>
<thead>
<tr>
<th>Phase</th>
<th>Interactional moves</th>
<th>Nominated ideas</th>
<th>Semiotic resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nomination</td>
<td><em>fear to people</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>people in Tokyo</em></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Agreement suspension</td>
<td><em>standard Japanese</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nomination</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agreement suspension</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Reframing</td>
<td><em>hyo:fungo eno kyo:i</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nomination</td>
<td><em>(threat from standard Japanese)</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disagreement</td>
<td><em>hito ni kanjiten dayo ne</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elaboration</td>
<td><em>(I feel (threat) to people)</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acknowledgement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 9. Emi and Fuyu’s interactional moves and shifting use of semiotic resources.

In sum, the above excerpt illustrated a group discussion as a locus for the students’ intensive semiotic work. They generated and iterated ideas by using diverse
semiotic resources in shared cognitive space they had constructed. The selective use of semiotic resources enabled them to make varied interactional moves and change the shape of knowledge. Such discourse practice is likely to help them to align to each other and the task.

**Appropriation Through Reported Speech**

In group discussions, the students made reference to not only their experiential knowledge but also knowledge in literature. Excerpt 5.2 is an initial segment of Jun and Hiro’s discussion (Group 2). Their research topic is Japanized English—English words coined in Japan (e.g., *konsento*, or *consent*, which means an outlet for an electrical device). Earlier on the day of this discussion, Jun and Hiro had spoken with the teacher in class about their research. After class, Jun and Hiro met in a group study room on campus to continue their project work. As Figure 10 shows, the room was equipped with a whiteboard and a desktop computer. In addition, a laptop computer was brought in by Hiro and was placed on a table. In this part of the discussion, Jun and Hiro talked about the current status of their project, their hypothesis and what they had learned from the literature. Excerpt 5.2 illustrates how they initiated and participated in the discussion through the use of reported speech. Moreover, it also shows a process in which they structured their environment by producing a written text—Jun’s note of the content of the discussion on the whiteboard (Figure 11), which, in turn, is likely to have afforded a shared cognitive space for their further semiotic work. In this excerpt, the concept of *open identity*, or Japanese people’s tendency to accept foreign ideas and customs, which Jun and Hiro explained in their oral
presentation as an influential factor in the development of Japanized English was mentioned.

Figure 10. The layout of the group study room and the location of Jun, Hiro, and tools used by them.

Excerpt 5.2 Open identity (Group 2, Week 10)

1 J: hypothesisu ga pata:nzu ga arunjanaika to.
2 ((writes on whiteboard [Figure 11])) (5.0)
3 The hypothesis is, there are probably patterns, (we) said.
4 H: ((shifts gaze to whiteboard))
5 J: de (2.0) rifarensu kara (1.2) [(osoraku) pata:nzu wa aru to.
6 And, from the reference, there are probably patterns, (it) said.
7 H: [(xx]
8 J: ((writes on whiteboard))
9 H: toriaezu ima nanako dane. ito san ni yoreba.
10 For now, there are seven, according to Ms. Ito.
11 J: (dane)
12  That's right.
13  H: ((shifts gaze to whiteboard))
14     de sorega e::to ma mikkusu suru kanousei mo aru to.
15  And, there is a possibility for them to mix, (it) said.
16  J: ma: un so:dane ((writes on whiteboard)) (8.2) ja naze kore ga
17     okiterunoka to.
18  Well, yeah, that’s right. Then, why this is occurring, (we) said.
19  H: ((looks at laptop computer and then at whiteboard))
20  J: naze kore ga okiteirunoka (1.0) kore wa kitto so:haru fakuta:zu no=
21     Why is this occurring. This is probably because social factors
22  H: =(xx) sakkino (teacher’s name) ga itta etto (xx) o:pun=
23     ((shifts his body to whiteboard))
24  J: =so:dane=
25     That’s right.
26  That’s right.
27  H: =nihonjin no o:pun na seishitsu (.) de ato katakana.
28  Open personality of Japanese people. And also katakana
29  J: ((writes on whiteboard)) n: (.) katakana wa docchikatteiuto aredane
30     sono: hairyasukunatta tte iu tokoro dakara=
31  Well, katakana is, it’s rather, well, it became easy to enter, so
32  H: =n:
33  Um:
34  J: jisshitsuteki na riyuu wa tabun kono o:pun identity dato (omoukara)
35  the actual reason is probably this open identity, I think.
A distinctive feature of the above discussion is Jun and Hiro’s frequent use of quotative particles. In line 1, Jun uttered hypothesis ga pata:nzu ga arunjanaika to (The hypothesis is, there are probably patterns, (we) said). In this utterance, which ends with to—a particle used for indicating that the utterance refers to the content of quoted speech (Nilep & Fujimoto, 2003), it appears that Jun was referring to a hypothesis that he and Hiro had built and thus the to is tying this discussion to a previous one. In line 5, he made another utterance ending with to: de rifarensu kara (osoraku) pata:nzu wa aru to (And, from the reference, there are probably patterns, (it) said). In this case, the source of the content knowledge is their reference and thus the to ties the knowledge and the reference. In line 9, Hiro said, toriaezu ima nanako dane. ito san ni yoreba (For now, there are seven (patterns), according to Ms. Ito). Here, by using another quotative marker ni yoreba (according to), he attributed the content of his utterance to Ito, who is the author of an article that they were using as a reference. In line 14, Hiro supplied additional propositional content by saying de sorega e::to ma mikkusu suru kanousei mo aru to (And, there is a possibility for them to mix, (it) said). In line 16, Jun uttered ja naze kore ga okiterunoka to (Then, why this
is occurring, (we) said). Thus, all of their utterances between lines 1 and 18 were ended with a quotative particle except Jun’s two brief replies (lines 11 and 16).

Reported speech using such quotative markers as *to* and *yoreba* seems to have two important functions in this interaction. First, the quotative markers provided Jun and Hiro with a means to initiate and participate in the discussion. Reported speech enables speakers to make a contribution to a conversation in somebody else’s words. Thus, it can be considered that Jun and Hiro were speaking in the voice of the author (Ito) and their past self, or as *animators* who “can openly speak for someone else and in someone else’s words” (Goffman, 1981, p. 145). In this interaction, performing as an animator allowed them to contribute content knowledge to their discussion without having to speak in their own voice. It should be noted however that they did not merely repeat the words of others. They spoke for their own communicative purpose, that is, to confirm the content of their hypothesis to advance the discussion. In this sense, it can be said that they adapted the words of others to their own communicative intention. In other words, they *appropriated* (Bakhtin, 1981) the words through reported speech. Moreover, a consequence of appropriation can be witnessed in Jun’s repeated utterances, which might appear identical but differ in an important way.

Line 16:  
ja naze kore ga okiterunoka to

*(Then, why this is occurring, (we) said.)*

Line 20:  
naze korega okiteirunoka. kore wa kitto so:sharu fakuta:zu no

*(Why is this occurring. This is probably because social factors)*
When he made the utterance in line 16, he ended the question with to thus framing the utterance as someone else’s words. On the other hand, when he uttered the question again in line 20, his utterance was formulated in direct speech without to. Considering the sequence of his utterances, it can be speculated that the utterance in line 16 helped Jun to appropriate the question and to utter it as his own in line 20. If it is the case, these two utterances might indicate a change in Jun’s footings from an animator who speaks in someone else’s words to an author who bears responsibility in relation to the content of his utterance (Goffman, 1981).

Second, the repeated use of quotative particles is also likely to have helped to establish a shared foundation of content knowledge between Jun and Hiro by enabling them to publicly confirm the current state of their knowledge. Prior to the utterances in reported speech, the knowledge they referred to was not integrated into a coherent sequence in this interaction. Through reported speech, they organized the isolated pieces of knowledge, or distributed cognition (Atkinson, 2011), in a coherent sequence—a research question, a hypothesis, and expected contributing factors. Moreover, by producing the written text on the board (Figure 11), they made their understanding visible, or, in the sociocognitive terms, extended their co-cognition into the material environment (Churchill et al., 2010). Establishing the shared, or agreed, foundation of content knowledge is an important step to advance the discussion because further interpretative work occurs as the participants operate on it. In fact, Jun’s disagreement (line 29) with Hiro’s contribution (line 27) can be seen as part of their effort to reduce a gap in their understanding between them and to establish a common conceptual ground. Especially when a written text is produced, it provides
the interactants with a perceptual ground, on which they can manipulate the content with verbal and nonverbal resources (e.g., speech, gestures, signs such as an arrow and a line). In other words, the written text becomes an affordance in the material environment. The way in which Jun and Hiro used a written text to manipulate the represented ideas is examined in the section on environmentally coupled gestures. In the next two sections, I consider how gestures were used in semiotic work during group work.

**Gestural Alignment**

Gestures have an important role to play in students’ conceptual development because they can scaffold the emergence of conceptual language about abstract phenomena in conversations (Roth & Lawless, 2002). In the present study, it was observed that representation in the gestural mode played a key role in the students’ interactions in group work. The following excerpt, taken from Group 1’s first meeting, illustrates how gestures helped Emi and Fuyu to align to each other and verbalize abstract ideas, which eventually led to the emergence of an L2 disciplinary term *intimate*. Continuing directly from Excerpt 5.1, the excerpt begins with Emi’s turn in which she elaborated on her idea that fear, a candidate answer to their research question, is felt to people.

Excerpt 5.3 Extraterrestrials (Group 1, Week 4)

20 E: umm. hyo:jungo eno kyou:i dattara nande kaeruka tte koton i nacchau
21    jan? demo are dayo ne. (yappa) hito ni kanjiten dayo ne.=

173
((shifts gaze to F, holds LH with palm pushing forward [Picture 5.4]))

*Umm. If it’s threat from standard Japanese, it’s like why do (I) switch, right?*

*But it’s like (I) feel (fear) to people.*

---

*Picture 5.4. Emi moves her left hand with the palm facing forward.*

---

25 F: =ah:: na[ruhodo ne:
26 ((nods slightly several times))
27 Ah, I see.
28 E: [hito ga. sono:: nan dakke? ano: chigau:: (0.4) kotoba wo
29 [tsukau: hito ((maintains her left hand with palm pushing forward))
30 People. Well, what was it? Well, people who use a different language
31 F: [tsukau tte koto wa mou ise- iseijin janai kedo hoka no kuni no hito
32 mitaina (0.2) kanji ne?
33 ((holds right hand with palm pushing forward twice [Picture 5.5]—a
34 similar hand movement to that E had made in line 8))
35 use (a different language), so it’s almost like extra- extraterrestrials
36 or people from other countries, right?
Picture 5.5. Fuyu moves her right hand with the palm pushing forward twice.

37 E: um[m
38 ((slightly nods))
39 F: [kimochi teki ni
40 Emotionally
41 E: do:kyo: no hito ja nai kara ne=
42 Because (they are) not the people from the same hometown.
43 F: =ah:: <shitashimi yasusa ja nai?>
44 Ah, shitashimi yasusa, isn’t it?
45 E: sore sakki no nan dakke?=  
46 That one, what was it?
47 F: =ah (sore) kaku tte itteta yone, intimate.
48 Ah, we said we would write it, intimate.
49 E: um. intimate tte kaitoku?= 
50 ((F begins to type [Picture 5.6]))
In this part of the group work, Emi and Fuyu continued their discussion on a social factor that influences people’s code-switching behavior. As discussed earlier, Emi’s elaboration on her idea in line 20 earned Fuyu’s acknowledgement in line 25. In addition to the syntactic reformulation, Emi’s gesture is likely to have played an important role in attaining Fuyu’s acknowledgement, which eventually led to the emergence of the L2 term *intimate*. In line 20, while saying *hito ni*, Emi slowly moved her left hand with the palm facing forward as if she was pushing something (Picture 5.4). This can be considered as a metaphoric gesture (McNeill, 1992), which expresses Emi’s emotional reaction to, or distance from, the people. As Emi continued to elaborate on her idea (lines 28-29), Fuyu took over the turn (line 31) and confirmed her understanding of Emi’s idea. In doing so, Fuyu moved her right hand with the palm pushing forward (Picture 5.5), a mirror gesture of the one that Emi has just used.
in line 8. The idea of *intimate* finally emerged after Emi added *do-kyo: no hito ja nai kara ne* (because not (they are) not the people from the same hometown) in line 41. In line 43, Fuyu said slowly: *Shitashimi yasusa ja nai (Shitashimi yasusa, isn’t it?)*. Here, Fuyu replaced Emi’s idea with an abstract L1 noun *shitashimi yasusa*, which was treated as an equivalent term to *intimate* in their discussion. Reacting to Fuyu’s nomination right away, Emi said: *Sore sakki no nan datta kke* (That one, what was it?) in line 45. Having mentioned the L2 term *intimate* earlier in this meeting, Fuyu immediately said: *Aa: sore kaku tte itteta yone, intimate* (Ah, we said that we would write it, right? Intimate), which earned an agreement by Emi. In line 49, Emi asked *intimate tte kaitoku* (Shall we write intimate?) and Fuyu began to type *intimate* in their research proposal using her tablet (Picture 5.6).

There are two crucial roles that gestures played in this interaction. First, the use of a metaphoric gesture seems to have scaffolded representational work in the verbal modality. As noted above, when Emi said *hito ni kanjiten dayone* ((I) feel (fear) to people) in line 21, she displayed a metaphoric gesture by making a pushing movement with her left hand (Picture 5.7). What needs to be noted here is that Emi’s psychological distance from the people, which the metaphoric gesture is likely to indicate, was not explicitly described in her verbal utterance in line 21. This means that, regarding the psychological distance, a gestural expression preceded a verbal expression. Such temporal delays between gestural and verbal modes to express abstract concepts have been observed by Roth and Lawless (2002), who argued that metaphoric gestures, which embody abstract concepts, become a basis for subsequent “representational work so that new competencies can develop in the verbal modality.”
(p. 300). In fact, having seen the gesture, Fuyu replaced Emi’s word *hito* (people) with expressions that contain a sense of distance such as *iseijn* (extraterrestrials) and *hoka no kuni no hito* (people from other countries) in line 31. Thus, it can be considered that Emi’s metaphoric gesture provided a perceptual ground for Fuyu to verbalize Emi’s abstract idea.

Second, the use of a mirror gesture is likely to have contributed to the emergence of the abstract L2 term *intimate*. In line 31, Fuyu made the similar pushing gesture with her hand (Picture 5.8). This mirror gesture ties Fuyu’s utterance to Emi’s one in line 21. The use of a mirror gesture, or *gestural tying* (Hayashi, 2005), suggests that Fuyu was trying to capture Emi’s intended idea (i.e., fear to people) and was also beginning to grasp it more fully than when it was first mentioned (line 3 in Excerpt 5.1). Such imitation is considered to help interactants to connect with each other and to promote mutual understanding (Rambusch & Zimkie, 2005). In the excerpt, they appear to align to each other more tightly in this part of the interaction. Fuyu’s
utterance in line 31, for instance, latched onto and continued Emi’s utterance in line 29. In line 29, overlapping with Emi’s utterance, Fuyu was able to offer an expression “*kimochi teki ni*” (emotionally) to complement Emi’s description of her idea. It is likely that, through such increasing alignment, Fuyu was able to reach the abstract concept *shitashimiyasusa*, which earned Emi’s agreement and the L2 term *intimate* was promptly supplied. Thus, considering the increasing alignment and the subsequent reference to the L2 term *intimate*, it can be considered that the mirror gesture facilitated the emergence of the term *intimate* in the interaction.

In sum, Excerpt 5.3 revealed the process in which gestures helped the emergence of an abstract concept and verbal expressions to describe it. As a result, Emi and Fuyu could jointly formulate a hypothesis that *shitashimiyasusa* (intimate) influences code switching. This connection between *shitashimiyasusa* and code switching became an explanandum in two explanations produced by Emi for Sakura in their second meeting, which is analyzed in the second half of this chapter. In the next section, I examine how students explored relations among concepts using talk, written texts, and gestures.

**Environmentally Coupled Gestures**

In order to explain disciplinary knowledge successfully, it is not sufficient to possess isolated pieces of knowledge. An explicator needs to understand how concepts are related to one another. In group discussions, it was observed that the students explored semantic relations among concepts as they prepared their oral presentation. In this process, a crucial role was played by *environmentally coupled gestures*
(Goodwin, 2007b, 2013), gestures that are coupled to phenomena in the environment such as a pointing gesture by speakers which enables them to tie their talk and an object in the environment. Students used environmentally coupled gestures to combine separate semiotic fields (i.e., talk and writing), which made possible the smooth progression of a discussion.

The following excerpts, taken from Jun and Hiro’s group work (Group 2, Week 13), illustrate three phases of their discussion on relations among key concepts in their research. The group work took place in a group study room on campus three weeks after their earlier meeting (Excerpt 5.2). As the day of their oral presentation approached, they discussed the organization of the content to present in this meeting. Picture 5.9 shows the location of Jun, Hiro, and tools used by them in this group work. Jun and Hiro stood in front of a whiteboard and Hiro’s smartphone was on a table. Jun’s smartphone was also on the table although it is not captured in the photo.

*Picture 5.9. Location of Hiro, Jun, and tools used by them (Group 2, Week 13).*
In the first phase, Jun and Hiro wrote what they would talk about in the presentation on the whiteboard: their research topic, a research question, and a few key words. This act of writing, as we shall see later, was an important step in establishing a conceptual and perceptual foundation for their discussion, which afforded the use of environmentally coupled gestures. Excerpt 5.4 begins with Jun’s turn in which he proposed to write down the content of the presentation on the board. Immediately before the excerpt, the research topic (Japanized English) and research question (How are they created?) had been written on the board by Hiro.

Excerpt 5.4 Patterns, borrowing, interference (Group 2, Week 13)

1 J: ((walks closer to the board)) jaa kakidashite ikou. (xx) ugokanaito
2 Let’s write. (We/I) gotta move.
3 H: ((passes a marker to J))
4 J: nandakke mazu hypothesisu pata:nzu pata:nzu de kokode iukoto
toshite nandakke borowingu toka
5 ((writes Patterns next to H [Picture 5.10], Patterns next to A, and
6 Borrowing [Picture 5.11]))
7 What was it? Hypothesis. Patterns. Patterns. And as for what (we/I)
8 should say here, what was it? Borrowing.

Picture 5.10. Jun writes Patterns on the board.
10  H: “nandakke° interferensu
11    ((checks his smartphone))
12  What was it? Interference.
13  J: inter(.)feren(.)su
14    ((writes Interference on the board))
15  Interference.

Figure 12. A photo of Jun and Hiro’s writing on the whiteboard (left) and its content (right).

In line 4, Jun added a note to what Hiro had written. He first wrote patterns next to H to indicate the content of their hypothesis: there are patterns in the way Japanized English words were created. He then wrote patterns next to A indicating their answer to the research question: there are in fact such patterns (Picture 5.10). After that, he
pointed out that *borrowing* needs to be included in the presentation and wrote down the word (Picture 5.11). Another key word *interference* was also written on the board after Hiro nominated it in line 10. Prior to this meeting, they had learned about these terms, *borrowing* and *interference*, in another class and the professor of the class had given them a handout on which the terms were explained in Japanese. Jun and Hiro had a photo of the handout in their smartphones and occasionally checked it during the discussion. Thus, the handout functioned as a sociocognitive tool to aid their discussion. Following the above interaction, Jun also wrote on the board a few more words including *lemonade*, which is an example to be used in the presentation, 全体 (*zentai* or whole), 基礎 (*kiso* or foundation or basics), 音 (*oto* or sound), and 文字 (*moji* or letters or written characters). Figure 12 shows the note completed by Jun and Hiro. As stated above, the importance of this first phase is that they produced the written texts, thus converting the mode of representation from evanescent speech to a visible object. As a result, their conceptual understanding was made public, which provided them with “a locus for shared work” (Goodwin, 2013, p. 16). In the sociocognitive terms, it can be said that they *extended* their co-cognition into the public space, the whiteboard, and in doing so they structured the environment to adapt it to their ongoing discussion.

In the second phase, Jun and Hiro explored relationships among the key concepts by utilizing the texts written on the board. Excerpts 5.5 and 5.6 illustrate how environmentally coupled gestures helped them to talk about potential relations among
the concepts. Excerpt 5.5 begins with the part where Jun wrote 全体 (whole) and 基礎 (foundation) on the board.

Excerpt 5.5 This includes this, right? (Group 2, Week 13)

1 J: korega zentai no pata:nzu
2 ((draws a bracket, writes 全体 [Figure 12]))
3 This is the whole patterns.
4 H: korega koreo fukunderutte kotodayone?
5 ((points at Patterns [Picture 5.12], and then moved RH so as to draw a
6 circle around Borrowing and Interference [Picture 5.13]))
7 This includes this, right?

![Picture 5.12. Hiro points at the word Patterns.](image)

![Picture 5.13. Hiro moves his right hand around Borrowing and Interference.](image)

8 J: chotto matte un: aa:: kore mou ikkai kita yone
9 ((writes 基礎, stares at the board, and then turn to the table))
10 Wait a moment. Well, um. This one came again, right?
11 H: ((checks his smartphone))
12 J: korega koreo fukunderu tte iuyoriwa=
13 ((briefly directs gaze to H who was checking his smartphone, shifts
14 gaze back to the board, and then utters with his both hands placed on
15 the table))
16 It’s not that this includes this, but
In line 4, Hiro proposed a relation among the concepts written on the board by saying *korega koreo fukunderutte kotodayone* (This includes this, right). In this utterance, the meaning was distributed between the speech and the written texts—the referents of the deictic pronoun *kore* (this) in the speech were expressed in the written texts. The two modes were tied together by the gestures shown in Pictures 5.12 and 5.13. He pointed at the word *patterns* written on the board (Picture 5.12) and then moved his right hand around the words *borrowing* and *interference* (Picture 5.13) while making the utterance (This includes this). Here, the written texts functioned as a perceptual ground on which Hiro built action orally and gesturally. Although a response to this utterance was suspended (line 8), it appears that its intention was comprehended by Jun without difficulty. In line 12, Jun moved the discussion forward by recycling Hiro’s utterance in his talk to display disagreement: *korega koreo fukunderu tte iuyoriwa* (It’s not that this includes this). A similar use of pointing gestures can be observed in Excerpt 5.6, which occurred approximately two minutes after Excerpt 5.5.

Excerpt 5.6 Don’t you think this includes everything over here? (Group 2, Week 13)

1  H: *korewa yoku wakannai* kedo koreni kanshitewa mou nanka konohen
2  zenbufukunde souna kiga shinai?
3  ((points at *Interference* [Picture 5.14] and then *Borrowing* [Picture 5.15],
4  and moves RH around the right half of the whiteboard [Picture 5.16]))
I’m not sure about this one, but as for this one, don’t you think (this) includes everything over here?

Picture 5.14. Hiro points at the word *Interference*. 
Picture 5.15. Hiro points at the word *Borrowing*. 
Picture 5.16. Hiro moves his right hand around 文 (letters), 音 (sound), and 短 (contraction).

J: un:: tashikani
Well, right.

In line 1, Hiro proposed that the topics of letters (文字), sound (音), and contraction (短縮) should belong to the topic of borrowing in the presentation. He said *korewa yoku wakannai kedo koreni kanshitewa mou nanka konohen zenbufukunde souna kiga shinai* (I’m not sure about this one (interference), but as for this one (borrowing), don’t you think this includes everything over here (letters, sound, contraction)) and simultaneously pointed at the texts written on the board to indicate the referents of the deictic terms in his talk (Pictures 5.14-5.16). Unlike the proposal made earlier (Excerpt 5.5), this idea earned Jun’s agreement as indicated by a response *tashikani* (Right) in line 7.

What should be noted in Excerpts 5.5 and 5.6 is the distinctive roles played by the written texts, gestures, and talk. As Figure 13 shows, a relation between the concepts was specified in the talk (A includes B), and the referents of the deictic terms *this* and *this one* were visually shown on the whiteboard. The two modes (i.e., the
written texts and talk) were tied by the gestures. Thus, Jun and Hiro’s multimodal interactions indicate that the written texts functioned as “a locus for shared work” (Goodwin, 2013, p. 16) on which a relation among concepts was orally negotiated, and that the gestures played a key role by tying the spoken and written modes. These distributed representations across the modes might suggest that because the content of the discussion was dense due to multiple academic concepts, the representations of the meaning needed to be distributed across the modes. In other words, it can be considered that the multimodality mediated the representations of dense content (Gajo, 2007). If this is the case, the distributed representations across the modes observed in these excerpts seem to support Escobar Urmeneta and Evnitskaya’s (2014) claim that dense discourse requires more mediation.

![Diagram showing the roles played by pointing gestures and speech.](image)

**Figure 13.** Distinctive roles played by pointing gestures and speech.

In the third phase, Jun and Hiro expressed both the concepts and their relation more explicitly in speech. In Excerpt 5.7, which directly follows Excerpt 5.5, Hiro responded to Jun’s disagreement (line 12 in Excerpt 5.5) by elaborating on his idea.
Excerpt 5.7 ‘In general’ and ‘examples’ (Group 2, Week 13)

17 H: =fukunderu tte iuka ma: nanteiuno (.) gaishite shakuyo: to kansho: ga aru naka no rei toshite kono oto dattari mo- moji dattari tteiunoga arunjanaino?

20 ((puts his smartphone on the table and moves RA so as to draw a circle above 音 and 文字 written on the board))

22 Rather than include but what should I say? There are borrowing and interference in general, and as examples, there are this sound and letters, right?

25 J: un:: so: nano kana? nanka chitto matte wakannai ((stares at board))

26 Well, is that so? Wait a minute. I’m not sure.

In line 17, Hiro produced an extended utterance in which a semantic relation among the concepts was described more explicitly than in his previous utterances. He first rejected his own idea (Rather than include) thus aligning to Jun’s disagreement, and then proposed an alternative idea (There are borrowing and interference in general, and as examples, there are this sound and letters). When compared with his earlier
utterance korega koreo fukundru (This includes this) in line 12 of Excerpt 5.5, the increased precision in Hiro’s verbal expression in line 17 is evident. While the initially proposed relation had been described with a verb fukumu (include), it was described with more specific expressions such as gaishite ... ga aru (There are ... in general) and rei toshite ... ga aru (As examples, there are ...). In the modified utterance, categories of concepts (i.e., general concepts and their examples) were made explicit. Moreover, the concepts under discussion were specified in his talk instead of being pointed at: shakuyou (borrowing), kanshou (interference), oto (sound), and moji (letters).

In Excerpts 5.8 and 5.9, similar instances of explicit verbal expressions are shown.

Excerpt 5.8 In the process of borrowing (Group 2, Week 13)

1  H: e kono shakuyo: (.) o suru:
2       ((moves RH toward his chest))
3       Well, doing this borrowing
4  J: um:
5  H: shitekuru katei de kono futatsu no hairikata ga attatte koto dayone?
6       ((moves RH around “音” (‘sound’) and “文字” (‘letters’) written on board and then shifts gaze toward J))
7       in the process of (borrowing), there were these two ways (for English words) to enter (the Japanese language), right?

Excerpt 5.9 ‘Under the influence of the Japanese language’ (Group 2, Week 13)

1  H: interferensu wa haittekite nihongo no eikyo: o ukete motomoto no
eigo ga kawacchatta tte koto damonne
Interference means that original English words entered and changed under the influence of the Japanese language, right?

In Excerpt 5.8, Hiro described a conceptual relation among borrowing, 音 (sound), and 文字 (letters) in his talk: shakuyo: o shitekuru katei de kono futatsu no hairikata ga attatte koto dayone (in the process of borrowing, there were these two ways (i.e., sound and letters) (for English words) to enter (the Japanese language)). In Excerpt 5.9, he sought to confirm the content of the concept interference as a phenomenon in which original English words entered and changed under the influence of the Japanese language. These utterances contain verbal expressions denoting target concepts and their relationships such as shakuyo: o shitekuru katei de ... ga atta (in the process of borrowing, there were ...) and nihongo no eikyo: o ukete (under influence of the Japanese language). They exhibit increased explicitness in the verbal mode, which was not found in earlier utterances in their discussion (e.g., This includes this).

In sum, the above three phases illustrate a trajectory of development in the representations of disciplinary knowledge in Jun and Hiro’s discussion (Figure 14). First, key concepts were represented as unconnected pieces of knowledge as reflected in their talk and the written texts on the whiteboard. Then, the relationships among the concepts were orally and gesturally explored. Finally, specific verbal expressions about abstract conceptual relationships emerged. In this process, the written texts on the board likely afforded the use of environmentally coupled gestures, which, in turn, allowed Jun and Hiro to focus on conceptual relationships in their talk. As a result, more explicit and specific verbal expressions emerged. The key role played by the
environmentally coupled gestures seems to be consistent with Roth and Lawless’s (2002) study, which showed that gestural representations scaffolded the emergence of students’ theoretical language.

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unconnected conceptual entities</td>
<td>Deictic terms and environmentally coupled gestures</td>
<td>Verbal expressions of key concepts and their relations</td>
</tr>
<tr>
<td>• hypothesis</td>
<td>• “This includes this.”</td>
<td>• “There are “borrowing” in general, and as examples, there are this “sound” and “letters.”</td>
</tr>
<tr>
<td>• patterns</td>
<td>• “It includes everything over here.”</td>
<td>• “In the process (of borrowing), there were these two ways to enter.”</td>
</tr>
<tr>
<td>• borrowing</td>
<td></td>
<td>• “Interference means that original English words entered and changed under the influence of the Japanese.”</td>
</tr>
<tr>
<td>• interference</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 14. Three phases in the representations of disciplinary knowledge by Jun and Hiro.

It should be also noted that the trajectory of development in Jun and Hiro’s representations of disciplinary knowledge seems to correspond with the developmental stages of explanations proposed by Woodruff and Meyer (1997)—the description of objects, the elaboration of relations among variables, and an explanation of a complex target phenomenon. In Figure 14, a similar trajectory of Jun and Hiro’s verbal representations is evident (descriptive language, relational language, and complex language). From the sociocognitive perspective, it can be speculated that such
trajectory of development in the representations reflects Jun and Hiro’s progressive alignment with each other and with complex disciplinary knowledge, which was scaffolded by their abilities in adapting the environment to their ongoing discussion (e.g., writing notes on the board, accessing the handout saved in their smartphones) and coordinating multiple sociocognitive resources (e.g., the written texts, gestures, talk, the information on the handout) to participate in the discussion.

Moreover, there was a noticeable difference in the occurrence of cognitive discourse markers across the phases in Jun and Hiro’s discussion. In the first phase when they wrote down the content of their presentation on the board, their utterances largely consisted of phrases denoting target concepts and cognitive discourse markers such as *I think* and *I don’t know* (Llinares & Morton, 2010) were not observed. On the other hand, in the second and third phases when they were exploring relations among concepts, they frequently uttered *wakannai* (*I’m not sure*) (e.g., line 1 of Excerpt 5.6, line 25 of Excerpt 5.7). In other parts of the discussion than those shown in the above excerpts, there were instances such as:

- **kansho:** ttenowa *wakannai* kedo (*I’m not sure about interference but…*)
  (Hiro)

- **zenzen** *wakanne*:ya. (*I don’t understand it at all.*) (Jun)

- **wakatta wakatta.** ore ga kanchigai shiteta. (*I got it, I got it. I was misunderstanding.*) (Jun)

These cognitive discourse makers suggest a shift in speakers’ footing from an *animator* who speaks in someone else’s words to an *author* who bears responsibility in relation to the content of their utterances (Goffman, 1981). The frequent use of
cognitive discourse makers by Jun and Hiro is likely to indicate that as they participated in conversations about semantic relationships among disciplinary concepts, they gained more control over the content under discussion. Such increased agency exhibits a clear contrast to their earlier discourse practices where they tended to speak in the voice of an author whose work they used in the research and their past self as examined in Excerpt 5.2.

So far, I have analyzed students’ interactions in intra-group discussions in group work. The multimodal analysis of their interaction revealed that they generated and developed their ideas regarding their project topic by drawing on diverse semiotic resources available in a shared cognitive space they had constructed (e.g., L1, L2, syntactic structure, gesture). These semiotic resources allowed them to align to each other and to disciplinary knowledge. In the second half of this chapter, I analyze students’ discourse practices in explanation sequences about disciplinary knowledge observed in group work.

**Student Explanations in Group Work**

Elaborated explanatory sequences are less likely to occur in intra-group settings because of lower demand for “clarity and explanatory power” than in inter-group settings (Woodruff & Meyer, 1997, p. 30). In group work by the focal groups, however, it was observed that the students occasionally generated long explanatory utterances, some of which might have been produced when an inter-group context emerged within a group (e.g., when a gap in knowledge was created within a group due to a member’s absence from a meeting). Student explanations in group work can
be largely categorized into two groups: addressee-oriented explanations and repeated explanations. The first type of explanation was produced in response to a request for information or clarification by another member of the group. The second type of explanation was produced in the absence of a request and the repeated explanations gained increased clarity. In this section, I examine these two types of student explanations of disciplinary knowledge produced during group work.

**Addressee-oriented Explanations**

As stated above, the students produced explanations when a member of their group signaled a request for information or clarification. Such contexts created opportunities for the students to take on the role of an explicator, which is usually played by a teacher in a classroom setting. These student-authored explanations appear to have been constructed to suit the specific contexts in which the explanations were situated and exhibit the student explicator’s awareness of the needs of the addressee.

In the following, I present three excerpts taken from the second meeting of Emi and Fuyu (Group 1, Week 4). This meeting was held in a classroom on the day following their initial meeting, and Sakura joined Emi and Fuyu. As Picture 5.18 shows, they sat at desks facing each other, and had their tablet computer on their desk.

In Excerpts 5.10 and 5.11, Emi explained twice why she and Fuyu had written the L2 term *intimate* in their research proposal—the key concept that Emi and Fuyu had reached as a result of their discussion (Excerpts 5.1 and 5.3). The first explanation was addressed for Fuyu (Excerpt 5.10) and the second explanation was addressed for Sakura (Excerpt 5.11). These two excerpts illustrate how Emi fulfilled the role of an
explicator and how Fuyu’s roles changed between the two explanations. Moreover, Excerpt 5.14 shows an active role played by Sakura in the post-explanation discussion.

Excerpt 5.10 Unable-to-speak syndrome (Group 1, Week 4)

1 E: sono sa ano intimate tte kaitan dakedone [shinmitsusa
2 ((shifts gaze to S [Picture 5.19] and then to F))
3 Uh well, we wrote intimate, shinmitsusa.
F: [ah so: so:so: shinmitsusa
d: nande (nande) shinmitsusa tte kaitandakke
((shifts gaze to E and reorients her body toward E [Picture 5.20]))
Ah yeah yeah yeah. Shinmitsusa. **Why did we write shinmitsusa?**

*Picture 5.20. Fuyu shifts gaze to Emi.*

E: ah Tokyo no hito o: hakken shitara shaberakunaru sho:ko:gun=
((S slowly shifts gaze to E [Picture 5.21]))
Ah, **an unable-to-speak-when-finding-Tokyoites syndrome.**

*Picture 5.21. Sakura slowly shifts gaze to Emi.*

F: =a: soreka [((slightly smiles))
Ah **that’s it.**
E: [((slightly laughs and then [slowly shifts gaze to S))]
In line 1 Emi uttered *intimate tte kaitan dakedone* (We wrote intimate) referring to the first meeting where she and Fuyu had decided to write the L2 term *intimate* in the proposal. Emi’s gaze (Picture 5.19) indicates that the utterance was targeted at Sakura, who was absent from the meeting. Emi then promptly provided an L1 translation of the L2 word (i.e., *shinmitsusa*)—an act which seems to be aimed at assisting Sakura’s comprehension. Fuyu, who had co-authored the research proposal on the previous day, quickly reacted to Emi’s utterance *Ah so: so: so:* (Oh yeah yeah yeah, line 4) but then asked *Nande shinmitsusa tte kaitandakke* (Why did we write shinmitsusa?) as she shifted gaze to Emi (Picture 5.20). This request for information by Fuyu is likely to have functioned as a discourse move for an explanandum to be identified, which is the first step in Gaulmyn’s model (1986) of the three-step explanation sequence (i.e., identification of an explanandum, explanation, sanctioning). Responding to the request, Emi gave the first explanation: *Ah, Tokyo no hito o: hakk en shitara shaberenakunaru sho:ko:gun* (Ah, an unable-to-speak-when-finding-Tokoites syndrome, line 8).

Notice that Emi constructed the explanation as a noun phrase by ending the utterance with a noun *sho:ko:gun* (syndrome). This construction, as discussed below, exhibits a sharp contrast to a more extended and elaborated explanation given for Sakura in Excerpt 5.11. After Emi provided the explanation, Fuyu immediately acknowledged it by saying *a: soreka* (Ah that’s it, line 11) and smiled with Emi (lines 11 and 13).

Excerpt 5.11, which continues directly from Excerpt 5.10, begins with Emi and Fuyu’s simultaneous shift of gaze to Sakura.
Excerpt 5.11 Depending on shinmitsusa, we use a dialect (Group 1, Week 4)

13 E: 

14 F: 

15 S:  [((slightly laughs and then slowly shifts gaze to S))]

16 ((shifts gaze to F and then to E [Picture 5.22]))

17 **What? What is it? What does it mean?**

*Picture 5.22.* Sakura asks what Emi meant.

18 E: wakannai kedo tabu- kitto, Tokyo ni detekite nanka doko shusshin (jan te) Hokkaido tte naruto: nanka anshinkan wa arujan=  

19 ((F gazes at E [Picture 5.23]. E looks at F and then shifts gaze back to S))

20 *I’m not sure, but perhaps- probably, when (we) come to Tokyo (and say) where you are from, and when we learn (you’re) from Hokkaido, there is a sense of relief, right?*
Fuyu shifts gaze to Emi.

25 F: =un [yappa jibun to onaji kenmin (°x°)]
26 ((nods, shifts gaze to S [Picture 5.24] and then to E))
27 Yeah. People from the same prefecture as me (°x°)

Picture 5.23. Fuyu shifts gaze to Emi.

28 E: [de nanka <shinmitsusa> ni yotte tsukau kana: to omotte. Date
29 gakkou no sensei demo: seito doushi wa futsu: ni tomodachi dakara:
30 ho:gen ma tsukau jan? demo sensei (1.0) sensei ni taishitemo
31 gominage gurai wa arewa hyo:jungo dato arewa minna
32 omotterukara: tsukatteru kedo: tsukawani to omoundayone
33 ((momentarily looks at F and shifts gaze back to S [Picture 5.25]))
34 And well depending on shinmitsusa, we use (a dialect) I think
35 Because, to teachers- among students because we are friends, we,
36 well, use a dialect, right? But to teachers to teachers too, we say
37 gominage (Note: a regional dialect for throwing garbage) because

Picture 5.24. Fuyu shifts gaze to Sakura.
everyone thinks it's standard Japanese, but I think we don’t use (a dialect to teachers).

In line 15, Sakura, who was unable to comprehend Emi and Fuyu’s exchange, asked *Eh nani nani sore. Do:yu:koto?* (What? What is it? What does it mean?) in line 15. This request for clarification triggered a second explanation by Emi. Unlike the one for Fuyu, the explanation for Sakura was much more extended and elaborated. Emi first said, *Wakannaikedo tabu- kitto, Tokyo ni detekite nanka doko shusshin (jan te) Hokkaido tte naruto: nanka anshinkan wa arujan* (I’m not sure, but probably, when we come to Tokyo (and say) where you are from, and when we learn (you’re) from Hokkaido, there is a sense of relief, right?, line 18). In this part of the explanation, Emi gave an example using a hypothetical situation in which people meet someone in Tokyo who is from the same prefecture and feel relieved. Exemplification, which is an explanation strategy to elaborate on an explanandum (Dalton-Puffer, 2007), was frequently used in the teacher and textbook explanations examined in Chapter 4. Here, the same strategy was used by Emi. It should be also noted that the construction of this utterance is predicational. Although the subject is omitted, an action *Tokyo ni detekite*
(come to Tokyo) and a state of mind *anshikan ha aru* (there is a sense of relief) were described in this utterance. Such detailed description was not found in the first explanation for Fuyu. Then, quickly aligning to Emi’s explanation, Fuyu gave a positive response *Un* (yeah) and added *Jibun to onaji kenmin* (people from the same prefecture as me) in line 25. This utterance by Fuyu was overlapped by Emi’s ongoing explanation (line 28), in which she provided an exposition *Shinmitsusa ni yotte tukau kana: to omotte* (Depending on shinmitsuda, we use (a dialect), I think). After that, Emi gave another example set in a school context of her hometown: *Seito doushi wa futsu: ni tomodachi dakara: ho:gen ma tsukau jan? demo sensei sensei ni ... tsukawanai to omoundayone* (among students because we are friends, we use a dialect, right? But to teachers, ... I think we don’t use). In this second example, the impact of *shinmitsusa*, or intimacy, on language use was explained through a comparison of two interactional contexts (i.e., student-student interaction, student-teacher interaction).

As shown below, the two explanations by Emi differ from each other quantitatively and qualitatively (Excerpts 5.12 and 5.13). First, quantitatively, while the explanation for Fuyu was compact, the one for Sakura was extended. Second, qualitatively, whereas the explanation for Fuyu involved one example constructed as a noun phrase, the one for Sakura consisted of two elaborated examples and a clear exposition (Depending shinmitsusa, we use a dialect). These explanations likely exhibit Emi’s awareness of the difference in the needs of Fuyu and Sakura—more information needed to be given to Sakura due to her absence from the initial meeting.
Excerpt 5.12 Emi’s explanation for Fuyu
1. EXEMPLIFICATION  Ah, an unable-to-speak-when-finding-Tokyoites syndrome

Excerpt 5.13 Emi’s explanation for Sakura
1. HEDGE  I’m not sure, but probably,
2. EXEMPLIFICATION 1  when (we) come to Tokyo (and say) where you are from, and when we learn (you’re) from Hokkaido, there is a sense of relief, right?
3. EXPOSITION  And well depending on shinmitsusa, we use (a dialect) I think.
4. EXEMPLIFICATION 2  Among students because we are friends, we use a dialect, right? But, to teachers too, we say gominage because everyone thinks it’s standard language, but I think we don’t use (a dialect to teachers).

Moreover, Excerpts 5.10 and 5.11 illustrate roles played by Emi and Fuyu in the interactions. In both explanation sequences, Emi played a role of an explicator in the three-part explanation schemata: an explanandum, an explicator, and an addressee (Dalton-Puffer, 2007, p. 140). She unpacked the meaning of the concept *intimate* in her explanations. In doing so, she adapted the content and thus aligned to the different needs of Fuyu and Sakura. Fuyu played two roles—an addressee in the first explanation and a co-explicator in the second explanation. The change in her roles is reflected in the orientation of her body and eye gaze as well as the content of her utterance. In the first explanation, her body and eye gaze were oriented toward Emi, who was performing the role as an explicator (Picture 5.20). This body positioning is
indicative of her role as a recipient of an explanation. On the other hand, in the second explanation, Fuyu shifted her body and eye gaze toward Sakura. As a result, she was sitting almost side by side with Emi facing Sakura (Picture 5.24). In talk, her utterance Jibun to onaji kenmin (people from the same prefecture) in line 25 was not a response to what Emi said in line 8 but an elaboration on it. These verbal and nonverbal features suggest that Fuyu’s role was changing from that of an addressee to that of a co-explicator.

In Excerpt 5.14, Sakura’s role begins to change. The excerpt occurred approximately 30 seconds after the two explanations were given by Emi. In the meantime, Sakura made an important contribution to the discussion by nominating the L2 term distance, which was agreed with by Emi and Fuyu. Excerpt 5.14 begins with Emi pointing out that the term had been probably addressed in class. Excerpt 5.14 illustrates a process in which Sakura took on an active role in the discussion.

Excerpt 5.14 It’s group of feeling. This is wonderful! (Group 1, Week 4)

1 E: ah: nanka yattayone distance [tte=
2  Ah, we learned about distance, didn’t we?
3 S: [“um:°
4 Um:
5 F: nandakke aredesho? ano (0.7) e::ko::yu: (xx) (1.2) nante iundakke
6 kore no ko:: suke:ru da
7 ((opens RA and LA widely as if clapping hands [Pictures 5.26], and
8 holds RH [Picture 5.27]))
9 What was it? That one. That... um, like this. What is it called? This
10 one... oh scale!
Picture 5.26. Fuyu opens her arms widely. Picture 5.27. Fuyu holds her right hand.

11  S: suke:ru?=
12  ((takes out a notebook from a bag))
13  Scale?
14  F: = so:
15  Yeah.
16  S: suke:ru [da
17  ((flipping through pages of the notebook))
18  Scale.
19  E: [ah high sta- s- status (°xx°)=
20  F: =sou high ste:tasu toka souiu ato wa sono group of feeling toka=
21  Right. Like high status or like that. And that.. like group of feeling.
22  S: =um: social distance [(xx)
23  E: [ah: group of f- group feeling janai?= [xx]
24  Ah, group of f- isn’t it group feeling?
25  S: =[°group of feeling°
26  F: =[sokka. so:
27  Oh yeah.
28  E: [(xx)=
29  F: =tashikani. watashitachi wa onaji nakama desu tekina=
30  Right. Like we belong to the same group.
31  S: =soremo arujan yappa chiikisei de aomori desu iwate desu tte ittara,
32  o:: tte narukedosa:=

204
(closes the notebook, shifts gaze to E, lifts RH [Picture 5.28] and then LH, and extends LH toward F [Picture 5.29])

That’s possible too, localness. (I’m) from Aomori, (I’m) from Iwate, then it’ll be like “wow” but

Picture 5.28. Sakura lifts her right hand. Picture 5.29. Sakura lifts her left hand.

F: =u::m ((maintains gaze on S and nods)

Yeah.

S (1.0) yappa (.) to:kyo: wa (wakana-) to:kyo: wa bekkaku dana.
saitama desu tte ittara [nanka

((extends LH toward F))

Tokyo is, Tokyo is special. (If I) say (I’m) from Saitama, well...

F: [(xxx)

((straightens up and reorients her body to S, smiles, and says something in an excited tone))

S: yappa group of feel[ing [(xx)

((speaks in an excited tone, nods))

Group of feeling

E: [ah:

((nods))

F: [(so: so: so:)

((smiles and nods a few times))

Yeah, yeah, yeah.

S: >nantonaku wakaru. saitama (tte iwarereba) nantonaku wakaru tte

ittanoha tabun group of feeling dayo. a:: kore subarashii<
((speaks fast in an excited tone and claps hands))

I think I know it. When I said I think I know it when you said (you’re from) Saitama, probably it’s group of feeling. This is wonderful.

F: ((smiles and claps hands with S [Picture 5.30]))

Picture 5.30. Sakura and Fuyu clap hands.

E: kore subarashii.

((claps hands [Picture 5.31]))

This is wonderful.

Picture 5.31. Emi claps hands.

In the first half of the excerpt (lines 1-30), Sakura’s utterances were minimal. In line 1, Emi said Ah: nanka yattayone distance tte (Ah, we learned about distance, didn’t we?). Reacting to Emi’s utterance, Fuyu tried to say something, but could not come up with
a word to use (line 5). While searching for a word, she opened her arms widely as if clapping hands slowly (Picture 5.26). Still being unable to find a word, she said nanteiundakke. kore (What is it called? This one, line 5) and simultaneously held her right hand in front of her (Picture 5.27). Immediately after this gesture, she uttered with a strong word-initial stress suke:ru da (Oh scale!) in line 6. The term scale had been introduced by the teacher in previous classes (Lessons 3 and 4, Week 2), and thus the sequence of Fuyu’s action in this part seems to indicate that her alignment to disciplinary knowledge was scaffolded by the gestural representation. Moreover, Fuyu’s contribution is likely to have led Emi to notice an associated L2 term high status (line 19), which was also discussed in class. Fuyu then mentioned another concept group of feeling (line 21). Although Emi provided corrective feedback on the form group feeling janai? (Isn’t it group feeling?) in line 23, it appears that the feedback remained unnoticed. Instead, Fuyu and Sakura continued their meaning-based discussion and elaborated on the concept group of feeling. In line 29, Fuyu said Tashikani. Watashitachi ha onaji nakama desu tekina (Right. Like we’re the same group) and thus unpacked the meaning of group of feeling.

In the second half of the excerpt (lines 31-63), Sakura began to take a lead in the discussion. In line 31, she said Soremo arujan. Yappa chiikisei de. Aomori desu.Iwate desu tte ittara, o:: tte narukedosa (That’s possible too, localness. “(I’m) from Aomori.” “(I’m) from Iwate.” Then, it’ll be like “wow.”) In this long utterance, Sakura elaborated on Fuyu’s idea by framing it with another L1 term chiikisei (localness) and provided an example situated in two prefectures in Japan, Aomori and Iwate. In line 40, she also referred to another prefecture Saitama as an example. These
utterances by Sakura suggest that she was gaining control over the concept *group of feeling* and was capable of generating appropriate examples. In fact, Fuyu, who is from Saitama prefecture, excitedly welcomed Sakura’s example (line 43). In the subsequent interaction, utterances of Sakura, Fuyu, and Emi repeatedly overlapped. Sakura’s utterance in line 46 was overlapped with Emi and Fuyu’s positive responses (lines 49 and 51 respectively). Furthermore, when Sakura offered a positive assessment *Kore subarashii* (This is wonderful) in line 55 and clapped her hands in line 56, Fuyu and Emi immediately joined her by clapping their hands (lines 60 and 62) and offering the same positive assessment (*Kore subarashii* by Emi in line 61). These verbal and nonverbal behaviors indicate that Sakura, Fuyu, and Emi were highly attuned to each other at this moment, which is likely to reveal that a shared interpretation about a phenomenon under discussion was established among them.

There are two important points to be noted in Excerpt 5.14. First, Sakura’s participation considerably changed between Excerpts 5.10 and 5.11 and Excerpt 5.14. Having been absent from the first meeting, in Excerpts 5.10 and 5.11, she needed assistance from Emi and Fuyu to fill a gap in her knowledge as indicated by her request for information (What is it? What does it mean? in line 17 of Excerpt 5.11), which was her only utterance in Excerpts 5.10 and 5.11. On the other hand, in Excerpt 5.14, her utterances not only increased in terms frequency but also became more varied in terms of the content. For instance, when she uttered a question (Scale? in line 11), seemingly requesting information, she could participate in the subsequent discussion without relying on Emi and Fuyu’s assistance. Moreover, in lines 31, 39, and 54, she elaborated on the content under discussion by devising examples on her
Such utterances by Sakura were not present in Excerpts 5.10 and 5.11. These quantitative and qualitative changes in Sakura’s utterances suggest that she adapted to, or aligned to, the flow of the ongoing discussion and, in doing so, expanded her repertoire of participation. Moreover, Sakura’s active participation in Excerpt 5.14 likely points to Emi and Fuyu’s successful fulfillment of an expert role in which they assisted a novice’s participation.

Second, Sakura, Fuyu, and Emi increasingly aligned to each other in Excerpt 5.14. Frequency counts show that, compared to Excerpts 5.10 and 5.11, the number of turns and instances of latching and overlapping doubled in Excerpt 5.14. As Table 19 shows, while the duration of interaction in Excerpts 5.10 and 5.11 and that in 5.14 is almost the same (43 seconds and 47 seconds respectively), the number of turns increased from 10 to 24, the instances of latching increased from two to five, and the instances of overlapping increased from four to seven. These measures indicate “high involvement” of participants (Tannen, 2005, p. 40), and a similar increase has been witnessed in Nishino and Atkinson’s study (2015) on graduate students’ collaborative L2 writing event. Increased alignment among Sakura, Fuyu, and Emi can be also witnessed in the shared assessments (Kore subarasii, lines 55 and 61) and the synchronized handclapping (lines 56, 60, and 62). According to Goodwin and Goodwin (1992), assessments provide a “place for heightened mutual orientation and action” (p. 154). Moreover, it is also argued that assessments are “building blocks of affective alignments” (Atkinson, Churchill, Nishino, & Okada, 2018). Thus, it can be considered that Sakura’s positive assessment in line 55 facilitated Fuyu and Emi’s emotional alignment with her, which in turn resulted in the shared assessments and the
synchronized hand clapping. Such a state of high alignment, which seems to reveal a shared interpretation among the participants, might be an important driving force for joint L2 writing to be successfully done.

Table 19. Comparison of the Number of Turns, Latching, and Overlapping between Excerpts 5.10 and 5.11 and Excerpt 5.14

<table>
<thead>
<tr>
<th></th>
<th>Excerpts 5.10 and 5.11</th>
<th>Excerpt 5.14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration</td>
<td>43 seconds</td>
<td>47 seconds</td>
</tr>
<tr>
<td>Turns</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>Latching</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Overlapping</td>
<td>4</td>
<td>7</td>
</tr>
</tbody>
</table>

Furthermore, when considering all five excerpts from Group 1’s meetings (Excerpts 5.1, 5.3, 5.10, 5.11, and 5.14), it becomes evident that Emi, Fuyu, and Sakura repeatedly packed and unpacked content knowledge as they discussed expected answers to their research questions. For instance, the experience-based knowledge about code-switching provided by Emi (Excerpt 5.1) was expressed with, or packed into, the L2 term *intimate* (Excerpt 5.3), and its referent was explained in detail, or unpacked (Young & Nguyen, 2002), by Emi twice in the subsequent discussion (i.e., the two explanations by Emi in Excerpts 5.10 and 5.11). Then, the unpacked content was further developed and then expressed with, or packed into, the L2 terms *distance* and *group of feeling*, and the referent of the latter term was elaborated on, or unpacked, as Sakura devised contextualized examples (Excerpt 5.14). A recurrent cycle of packing and unpacking knowledge is a common practice in academic discourse (e.g., Young & Nguyen, 2002). In the instructional discourse of the sociolinguistics course, it was observed that the teacher strategically unpacked
dense disciplinary concepts for students by using nonacademic language and giving examples in familiar contexts and packed knowledge by introducing discipline-specific terms. Thus, it can be argued that the group meetings provided Emi, Fuyu, and Sakura with opportunities to practice manipulating disciplinary knowledge in a similar manner to discourse practices in explanations by the teacher.

**Repeated Explanations**

During group work, extended student explanations were also observed in the absence of a request for information by a group member. In his meeting with Hiro (Group 2, Week 10), Jun repeatedly made extended utterances in which he explained key concepts about their research topic, Japanized English. In the process, his explanations gained increased clarity. In this section, I consider how Jun’s discourse practices changed across the repeated explanations by focusing on three features: a question-answer format, metadiscourse markers, and lexicogrammatical devices.

Before presenting the analysis of Jun’s explanations, I briefly revisit the first half of Excerpt 5.2, which was taken from the same meeting, to outline Jun and Hiro’s discourse practices at the beginning of the meeting.

Excerpt 5.2 Open identity (Group 2, Week 10)

1 J: hypothesisu ga pata:nzu ga arunjanaika to.
2 ((writes on the board [Figure 7])) (5.0)
3 The hypothesis is, there are probably patterns, (we) said.
4 H: ((shifts gaze to the board))
And, from the reference, there are probably patterns, (it) said.

And, there is a possibility for them to mix, (it) said.

For now, there are seven, according to Ms. Ito.

That’s right.

Well, yeah, that’s right. Then, why this is occurring, (we) said.

As discussed above, in this initial part of the meeting, Jun and Hiro’s utterances remained relatively short. In addition, the frequent use of quotative makers to and yoreba suggested that Jun and Hiro were mostly speaking in the voice of the author, whose work they were using in their research as a reference or their past self.

Shortly after Excerpt 5.2, Jun and Hiro engaged in individual work to conduct online research and approximately one hour later, they stood in front of the whiteboard again and resumed the discussion. In the resumed discussion, Jun’s discourse practices changed, and he began to make more extended utterances as shown in Excerpt 5.15.

Excerpt 5.15 Buddhist monks and manyougana (Group 2, Week 10)

This is (about) identity.
The story of Buddhism

J: =so: so: (1.0) bukkyo ga haittekita toki ni yomitai kara >ore kokokarawa oreno arene mo:so:ne. suisoku ne.< (0.4) bukkyo haitte kimasu,

Yeah, yeah, yeah. When Buddhism came in, (they/people) wanted to read (its teaching), from here, (it’s) my imagination, my assumption. Buddhism comes in,

H: °yomemasen° (They) cannot read (it).

J: so: so:ryotachi ga yomemasen, jaa bukkyo (tteiu igi) wo rikaisuru niwa (xx) shiyou, manyo:gana o atemasu, (1.4) senren saremasu, katakana ni narimasu (1.0) dato omou

Yeah, yeah. Monks, monks cannot read (it), then in order to understand (the teaching of) Buddhism, let’s (xx), (they) use manyo:gana (Note: old-style Japanese writing system from which katakana developed). (It) gets sophisticated. (It) develops into katakana, I think.

H: manyo:gana (1.0) °manyo:gana (xx) wakannai kedo° Manyogana. I’m not sure about manyogana.

In this part of the discussion, Jun and Hiro went over key words written on the board.

In line 5, Jun initiated an explanation sequence, in which he elaborated on the origin of katakana. Compared with Excerpt 5.2, Jun’s utterances in Excerpt 5.15 were more extended. Moreover, the end of the explanation was marked by a cognitive discourse marker dato omou (I think, line 15), which suggests the speaker’s footing as an author (Goffman, 1981) who bears responsibility for the content of the utterance as argued by Llinares & Morton (2010).
As the discussion proceeded, Jun gave even longer monologic explanations.

Excerpts 5.16 and 5.17 show part of monologic explanations given by Jun later in the discussion. In both explanations, open identity, a key concept in his group’s oral presentation, was addressed again.

Excerpt 5.16 Open identity and katakana 1 (Group 2, Week 10)

1 J: orerawa eigo o waseieigo tte iwa(rerunogaaru)wakejan. de ima
2 pata:n o ageta jan. dakara waseieigo tteiunoga ari pata:n mo aru.
3 jaa korewa dokokara kurunodarou tte iutokorode orerawa o:pun na
4 identity tteiunoo hitotsu teiji shimashita, soreo konkyo rikutsuzukeru
5 ron toshite katakana English ga arimasu katakana ga arimasu, jaa
6 katakana tte do:yu:tokorode umaretano, do:yu: tsukawarekata o
7 shitekitano no ko:desho imano
8 We have English- what’s called Japanese English (wasei eigo) and
9 (we) listed up the patterns, right? So, there is Japanized English
10 and there are patterns, too. Then, where does this come from? We
11 introduced open identity, as evidence to support it. There is
12 katakana English. There is katakana. Then, how was katakana
13 born? How has it been used?

Excerpt 5.17 Open identity and katakana 2 (Group 2, Week 10)

1 J: naze orerawa tsukau noka tsukawareuyo:ni nattanoka naze konnani
2 o:inoka. coindo English surrounding us desho? naze why does it why
3 does it surrounding us ka surround us ka “ma i:ka” de: o:pun na
4 identity o:pun na identity ga arimasu, sarani orerawa kore o own
5 wa:do ni things ni shitokoua (re:ru) tokamo arukarane, ni
6 sorega korega korega nihon no nihonjin no identity
Why do we use (katakana)? How did (katakana) come to be used?
Why are there so many? Coined English surrounding us, right?
Why, why does it does it surrounding us? Surround us? Well,
that’s fine. And there is open identity, open identity. Moreover,
we change this into our own word-, things I should say because
there is (an example of rail). It is- this is Japanese-, Japanese
people’s identity

An examination of Jun’s utterances suggests that his discourse practices changed as he repeatedly produced extended explanations. More specifically, he progressively coordinated various discursive and lexicogrammatical resources, which is likely to have contributed to increased clarity of his explanations. First, propositional content of the explanations was increasingly organized in a question-answer format. In Excerpt 5.2, there was one part in Jun’s talk which was organized in a question-answer format:

(1) QUESTION ja naze korega okiterunoka to. naze korega okiteirunoka.
ANSWER korewa kitto so:sharu fakuta:zu no=
Then, why this is occurring, (we) said. Why is this occurring? This is probably because social factors

(lines 16-17, 20)

On the other hand, in a subsequent explanatory sequence, the question-answer format was used repeatedly:

(2) QUESTION naze konna koto ga okotterunoka
ANSWER kore ga okotta kikkake no hitotsu toshite katakana ga agerarerunjanaika
**Why is this occurring?** As a reason why this occurred, **katakana can be considered.**

(3) QUESTION  nande korega okoriyasukattanoka okotteshimattanoka kore genin toshite hitrotsu agerarerumono wa nannanoka tte itta tokini

ANSWER  **katakana ga ageraremasu**

**Why was this easy to occur, have occurred?** This, when it comes to a reason that can be given, **katakana can be considered.**

(4) QUESTION  de jaa katakana ga(aruto) doushite so: nano? jaa kigen o tadorou

ANSWER  katakana wa motomoto ko:yu: koto kara umaremashita

*And then, why was it so (easy to accept) when there was katakana? Then, let’s trace the origin. Katakana was originally born from this (i.e., the history of katakana being used to read Chinese)*

In the above question-answer adjacency pairs, the answers were immediately given by Jun. These questions appear to highlight a topic, or identify an explanandum (Gaulmyn, 1986), in the sequence. Such discourse practice which was also observed by the author of the course textbook (Holmes, 2013) seems to enhance the organizational clarity of the monologic explanations.

Second, metadiscourse markers, which signal the organization of an explanatory sequence, began to be used more frequently. The following instances were taken from Jun’s extended explanations given later in the meeting.

(1) **katakana no rei o mitemimashou**

*Let’s look at the example of katakana.*
In Sentence 1, Jun announced a discursive goal of his talk (mitemimashou, let’s look at) and simultaneously revealed a semantic relation among elements addressed in his talk (no rei, the example of). In Sentence 2, he used a transitional expression for example in English to signal the role of the upcoming talk about kanji as an example. In Sentence 3, the discursive goal of the talk was explicitly announced (tadorou, let’s trace). The use of these discourse markers, which were not frequently observed in Jun’s earlier utterances (e.g., Excerpt 5.2), suggests his increased control over, or alignment with, the content of the talk.

Third, he began to employ lexicogrammatical devices that clarified semantic relations among ideas. A comparison of Excerpts 5.18 and 5.19, both of which were explanations on the history of katakana, exhibits a difference in the use of such lexicogrammatical devices.

Excerpt 5.18 Jun’s explanation of the history of katakana (Explanation 1)


Buddhism comes in. Monks cannot read (it). Then, in order to understand (the teaching of) Buddhism, let’s (xx). (They) use manyogana. (It) gets
Excerpt 5.19 Jun’s explanation of the history of katakana (Explanation 2)

[1] chu:goku no ko:yu mono o yomu tameni / so:tachi ga tsukatta mono / ga /
In order to read these things from China / thing monks used / subject marker
ga/ henka shite umareta / no / ga / katakana desu
changed and was born / thing / subject marker ga / katakana is

What monks used in order to read things from China went through changes
and therefore katakana was born.

In Explanation 1, which was taken from an initial part of the meeting, ideas were
expressed in six short sentences as indicated by a sentence-final auxiliary verb masu or
its negative form masen. In this explanation, most ideas were presented as isolated
pieces of knowledge without being connected by linguistic devices such as
conjunctions and adverbs. On the other hand, in Explanation 2, which was given later
in the discussion, almost the same ideas were addressed in one long sentence in which
the ideas were connected with each other through the use of a conjunctive particle
tameni (in order to) and the joint use of a modified noun phrase ending with mono
(thing), or its shortened form no, and a subject marker ga. As a result, semantic
relations among ideas (e.g., an action and its purpose, a process and its consequence)
were described more explicitly in Explanation 2 than in Explanation 1.

In sum, the above examination illustrated that Jun increasingly used a
question-answer format, metadiscourse markers, and varied lexicogrammatical devices
as he repeatedly produced extended, monologic explanations of the key concepts. As a
consequence, the organizational structure of the explanations, discursive goals of his talk, and semantic relations among ideas were more explicitly described. Considering that these features were not frequently observed in Jun’s early explanations in the meeting, it can be argued that he was expanding the repertoire of participation in these explanatory sequences through repeated explanations. In other words, it can be argued that as he repeatedly produced extended explanations, he coordinated the discursive and lexicogrammatical resources, which is likely to help him to give clear explanations in the oral presentation helped him

**Summary**

In this chapter, I analyzed students’ discourse in group work to investigate how they align to disciplinary knowledge, which they need to explain in oral presentations and written reports. The analysis of their interactions indicated that they generated and iterated ideas by drawing on diverse semantic resources (e.g., L1, L2, gestures, gaze, body orientation), which enabled them to make varied interactional moves to advance the discussion. When they could not reach an agreement, they made their intended meaning more accessible by shifting the semiotic resources they used and reformulating the syntactic structure of their utterances. For instance, the gestural elaboration of meaning seems to have enabled the students to grasp each other’s ideas, which in turn resulted in the emergence of abstract ideas and language. It was also observed that they established a conceptual foundation in the discussion by appropriating disciplinary knowledge through reported speech and exploring semantic relations among the concepts through the coordinated use of speech, written texts, and
pointing gestures. It appears that in these processes, they structured their environment for the discussion (e.g., writing ideas on the board, establishing mutual orientation) and extended their cognition into the public space (e.g., expressing ideas with gestures, gesturally exploring semantic relations among ideas).

Furthermore, the students produced extended explanations about disciplinary knowledge in group work, which can be categorized into two groups. The first group of explanations, which were given in response to a request, exhibited addressee-orientation of explanations (Dalton-Puffer, 2007; Gaulmyn, 1986) (e.g., a compact and descriptive explanation for a non-novice, an elaborated explanation involving an exposition and exemplifications for a novice), and seem to have enabled the addresses to become active participants in the post-explanation discussion. The second group of explanations, which were generated in the absence of a request, exhibited increased clarity through repetitions and is likely to have prepared the explicator for the oral presentations. In these student explanations, disciplinary knowledge was represented in various forms (e.g., specific examples, abstract concepts, descriptive explanations, relational explanations), which is similar to the instructional discourse examined in Chapter 4. Such diverse discourse practices likely suggest the students’ developing alignment with the target knowledge and disciplinary discourse.
CHAPTER 6

STUDENT EXPLANATIONS OF DISCIPLINARY KNOWLEDGE IN ORAL PRESENTATIONS AND WRITTEN REPORTS

The purpose of this chapter is to investigate student-authored explanations of disciplinary knowledge. I specifically aim to examine the organization and discourse practices in students’ explanations in oral presentations and written reports (Research questions 3b and 3c). Oral presentations and research papers, which are common in tertiary education (Hyland, 2009), are a demanding task for students because they need to demonstrate the ability to generate elaborated and coherent explanations of their subject knowledge. In this chapter, I investigate how students explained the content knowledge that they gained through the sociolinguistics research project.

This chapter is divided in two parts. In the first part, I examine student explanations in oral presentations, which is divided into three sections: the oral presentation context, the organization of oral presentations, and discourse practices in students’ oral explanations of disciplinary knowledge. In the second part, I examine student explanations in written reports, which is divided into three sections: the written report context, the organization of written reports, and discourse practices in students’ written explanations of disciplinary knowledge. The findings presented in this chapter are revisited to consider the development of the students’ explanations of disciplinary knowledge in Chapter 7.
The Oral Presentation Context

The students gave oral presentations in groups in Weeks 13 and 14 after all of the main lessons were finished (In Week 15, a review class and a final examination took place). On the days of the presentations, the students reported on their sociolinguistics research project using slides in a 15-minute time slot followed by a question and answer session. As Picture 6.1 shows, the student presenters spoke in the front of the classroom—a position where the teacher usually stood, and their slides were shown on a screen behind them. Other students, who were the audience of the presentations, sat at desks in the classroom and the teacher sat with them, but at the front of the room.

Picture 6.1. Location of student presenters, the audience, the teacher, and the screen (Weeks 13-14, Oral presentation).

There are two points to be noted regarding the discursive context of oral presentations. The first point is the distribution of speaking rights. When students participate in lectures and whole-class discussions, the teacher, who has “the default right to the floor” (Dalton-Puffer, 2007, p. 150), usually manages the interactions. On
the other hand, during oral presentations, even though they proceed under the teacher’s supervision, the right to the floor is granted to student presenters. It is thus the student presenters’ responsibilities to start the presentation (usually after getting a cue from the teacher), provide extended explanations of a target content matter, and adequately participate in a Q&A session. Considering the students’ typical roles as addressees of explanations by the teacher, and their tendency to produce a minimal amount of explanations in class (Dalton-Puffer, 2007; Llianares & Morton, 2010), the responsibilities that accompany the new distribution of speaking rights are likely to create a challenge for students, particularly when the explanandum involves dense content that requires mediation (Escobar Urmeneta & Evnitskaya, 2014; Gajo, 2007).

The second point is the modification of the context in which explanations are produced in the oral presentations. When the students give the presentations, the participation frameworks change from that of a teacher-led lesson to that of a student-centered presentation, and the participants’ roles also change (i.e., student presenters, the audience of student presentations). From a sociocognitive perspective, the changes in the participation frameworks and the participants’ roles suggest the emergence of a new structure in the sociocognitive space. Although the classroom and the participants are the same as in teacher-led lessons, the environmental and sociocognitive affordances are likely to be different. For instance, the topic of the presentation might be fairly new to the audience whereas the topics in teacher-led lessons tend to be made available repeatedly through the syllabus, the course textbook, and announcements in class—all of them are likely to be the teacher’s attempts to structure the sociocognitive environment for his lessons. In addition, the audience might be unsure of how to
participate in the discourse of the presentation whereas they are probably more familiar with the discourse of teacher-led lessons due to their accumulated experiences in class. Moreover, even a whiteboard might function as a new sociocognitive resource for the audience if the student presenters’ way of using it deviates from what they are used to. Thus, the redefined participation framework in the oral presentations likely means that the participants including the student presenters and the audience need to construct a new sociocognitive space, which in turn creates a very different context for explanations to be generated from those of teacher explanations in class and student explanations in group work. Such modifications of the context are likely to affect the way explanations are constructed in the oral presentations.

**Organization of Students’ Oral Presentations**

Before moving to the analyses of discourse practices in students’ oral presentations, I examine the organization of the presentations in order to understand their overall structure. An examination of the three focal groups’ oral presentations reveals that while there was a variation across them, the presentations were generally organized in the following sequence:

1. INTRODUCTION
2. RESEARCH QUESTIONS
3. FINDINGS
4. Q&A

First, in the introduction, the student presenters introduced themselves, their research topic, and the rationale behind their topic selection. Next, they presented their research questions, which were occasionally preceded by a brief introduction of data collection
methods. They then spent most of the allotted time on reporting their findings. Finally, they responded to questions and comments made by the teacher and classmates. A summary of the organization of the oral presentations by the focal groups is provided in Table 20.

Table 20. A Summary of the Organization of Oral Presentations by Focal Groups

<table>
<thead>
<tr>
<th>Name</th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Language shift in Japan</td>
<td>Japanized English</td>
<td>Using men’s speech by women</td>
</tr>
<tr>
<td>Major sections</td>
<td>• Introduction (Presenters, Topic, Outline)</td>
<td>• Introduction (Presenters, Topic, Outline)</td>
<td>• Introduction (Presenters, Topic)</td>
</tr>
<tr>
<td></td>
<td>• Data collection method</td>
<td>• Research purpose</td>
<td>• Research questions</td>
</tr>
<tr>
<td></td>
<td>• Research questions</td>
<td>• Hypothesis</td>
<td>• Findings</td>
</tr>
<tr>
<td></td>
<td>• Findings</td>
<td>• Findings</td>
<td>• Conclusion</td>
</tr>
<tr>
<td></td>
<td>• Conclusion</td>
<td>• Conclusion</td>
<td>• Q&amp;A</td>
</tr>
<tr>
<td></td>
<td>• Q&amp;A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duration (including Q&amp;A)</td>
<td>17 min</td>
<td>28 min</td>
<td>17 min</td>
</tr>
</tbody>
</table>

Discourse Practices in Students’ Oral Explanations of Disciplinary Knowledge

In this section, I examine discourse practices in the students’ oral presentations in order to investigate how the students explained disciplinary knowledge and performed the role of a presenter. This section is divided into four subsections: setting up the presentation context, guiding the audience through the presentation, shaping content knowledge, and Q&A sessions. These four subsections represent key aspects of student explanations of disciplinary knowledge in oral presentations.
Setting Up the Presentation Context

In oral presentations, the presenters’ first task is to establish their role as a presenter and construct an explainer-addresssee relationship with the audience. They also need to clarify the topic of the presentation and the rationale for choosing the topic. In this section, I examine how student presenters established their role as a presenter and announced their research topic and its rationale.

The following three excerpts, Excerpts 6.1-6.3, show how Fuyu, Hiro, and Momo started their presentation.

Excerpt 6.1 Establishing the presenter-audience relationship (Group 1, Week 14)

1 F: ((Slide 1 is shown on screen; F is standing in front of class and looking at T [Picture 6.2]))

2 looking at T [Picture 6.2])

3 T: ((gives a big nod))

4 F: ((slightly reorients body to Ss [Picture 6.3]) °okay° hello everyone

5 ((slightly laughs))
Picture 6.3. Fuyu slightly reorients her body to the audience.

6  Ss: °hello°
7  F:  hello I am Fuyu and my partner are Sakura and Emi. ((extends RA to
8  S and E respectively))

Figure 15. Slide 1 (Group 1).
Excerpt 6.2 Establishing the presenter-audience relationship (Group 2, Week 14)

1. H: ((Slide 2 is shown on screen; H is standing in front of class and looking at T [Picture 6.4]))

2. T: [((gives a big nod))]

3. H: °can I start?° ((reorients body to Ss [Picture 6.5])) hi everyone

4. Ss: °hello°


Picture 6.5. Hiro reorients his body to the audience.
Excerpt 6.3 Establishing the presenter-audience relationship (Group 3, Week 13).

1 M: ((Slide 3 is shown on screen; M is standing in front of class and looking at T [Picture 6.6]))

2 looking at T [Picture 6.6])

3 T: ((shifts gaze to M)) °thank you very much°

4 M: ((reorients body to Ss [Picture 6.7])) **hello everyone**

5 Ss: °**hello**°
Excerpts 6.1-6.3 illustrate that Fuyu, Hiro, and Momo largely followed the same steps in initiating their presentation. First, they showed their slides on the screen (Figures 15-17), which would help them to structure the classroom environment for the presentation, and quietly stood at the front of the classroom while looking at the teacher (Pictures 6.2, 6.4, and 6.6). Standing in the front of the classroom, which is
usually occupied by the teacher, likely implies that the person is a primary knower with the right to the floor. After receiving nonverbal or verbal cues from the teacher in the form of the head nods (line 3 in Excerpt 6.1, line 3 in Excerpt 6.2) and the utterance *Thank you very much* (line 3 in Excerpt 6.3), they reoriented their body to the audience (Pictures 6.3, 6.5, and 6.7). They then greeted the audience (e.g., *Hello everyone, Hi everyone*) and the audience responded by saying *Hello*. Here the cue from the teacher and the presenters’ reorientation of the body indicate that the right to the floor was officially given to the student presenters. This marks a change in the participation frameworks and the participants’ roles: The students became the legitimate speakers with the responsibility to manage the floor and the teacher became a member of the audience. Similarly, the verbal exchange with the audience was brief but meaningful because it displays the audience’s acknowledgement of the new participation framework and their roles as audience. Such distribution of roles (*an explicator* and *audience*) constitutes the initial step in the construction of explanations (Gaulmyn, 1986). From a sociocognitive perspective, it can be said that the students aligned to the new participation framework and their role afforded by the setting, i.e., an in-class oral presentation. At the same time, they actively structured the environment for their presentation. More specifically, they adapted the environment by setting up the slides, obtained the right to the floor through the largely nonverbal exchange with the teacher, and secured the presenter-audience relationship through the multimodal interaction with the audience (e.g., verbal greeting and a response, the reorientation of the body).
Excerpts 6.4-6.6 show how the three speakers, Fuyu, Hiro, and Momo, introduced their research topic and their rationale for selecting the topic to further set up the context for the presentation.

Excerpt 6.4 Specifying the presentation topic (Group 1, Week 14)

1 F: **we researched about language shift in Japan.** (5.0) ((changes the slides)) (x) our outline is this ((looks back and extends LA to screen)) °yeah° first we explain about reason why we chose this topic and second (x we) answer to the question. and we (xx) conclusion. ((changes the slides)) and **the reason why we chose this topic is** (that) because we wanted to find out why when where and whom and how Japanese people shift their codes between regional dialects and standard dialect dialect

Excerpt 6.5 Specifying the presentation topic (Group 2, Week 14)

1 H: **we gonna introduce ((extends LA to screen)) Japanize English.** So uh: some past two groups introduced ah? present al- almost same uh: theme, but our presentation ((extends RA to screen)) is a little bit different from them. so ((J changes slides)) this is ((extends LA to screen)) our: (.o) outline, and ((J changes slides)) our theme of our research is to explore ((extends LA to screen)) how Japanese English be created. so we are focusing on the creation patterns of Japanized English and **we chose this topic because our we are very surrounded by uh Japanized words, not only from English uh also from some foreign countries**
M: today, we are going to tell about talk about using men’s speech by women, why did we choose using men’s speech by women. because I think it’s unfair. generally, women use men’s speech, people think it’s comfort- not comfortable. but I think it’s unfair, (looks at the computer) second is one is even though people think it is uncomfortable, if I say, if I use men’s speech, it is comfortable for me. third one is discrimination. um: (2.0) I wonder why only women use men’s speech is sound bad, so I chose this topic.

In Excerpts 6.4-6.6, similarities and differences in the students’ discourse practices can be found. First, the initial part of each excerpt indicates that the introduction of the research topic was similar among the three speakers. All of the students’ first utterances were constructed with the first-person pronoun we, an action verb (i.e., researched, introduce, talk), and the research topic as the object (language shift in Japan, Japanese English, using men’s speech by women). In these sentences, the student presenters are posited as the actor, which might signal their control over, or ownership of, the knowledge being reported. Second, there is a similarity with regards to the reason why they chose the topic—all of them contain a because-clause with a first-person pronoun as its subject (because we wanted to find out, because we are very surrounded by, because I think). This shared feature signals the students’ personal involvement with and motivation for investigating the topic.
At the same time, there are differences in the content of the because-clauses. Fuyu, who gave a minimal introduction of the rationale, simply stated questions posed by her group without elaborating on why they wanted to find answers to the questions. Hiro, who gave a more extended introduction than Fuyu, referred to the external, linguistic environment as a reason why he and Jun chose the topic (we are very surrounded by uh Japanized words, not only from English also from some foreign countries). Finally, Momo, whose utterance was most extended, elaborated on the reasons why her group chose this topic using three key words, unfair, uncomfortable, and discrimination. In her extended utterance, she used the first person pronouns I or me every time she elaborated on a reason (i.e., I think it’s unfair, it is uncomfortable for me, I wonder why only women ...). The repeated use of the first-person pronouns suggests her strong personal involvement with the topic. Next, I examine how student presenters navigated the audience through the presentation.

**Guiding the Audience Through the Presentation**

In the oral presentations, the student presenters navigated the audience through their presentation by frequently using of metadiscourse markers and other multimodal semiotic resources such as text information on slides and gestures. The following excerpts illustrate how frame markers were used along with pointing gestures to indicate a schematic structure of content knowledge addressed in the presentation. In Excerpt 6.7, taken from Group 1’s presentation, Fuyu presented an outline of their talk using a slide.
Excerpt 6.7 Indicating a sequence (Group 1, Week 14)

1  F: (x) our outline is this ((extends LA to Slide 4 [Picture 6.8])) °yeah°
2  first we explain about reason why we chose this topic. and second (x
3  we) answer to the question

Picture 6.8. Fuyu extends her left arm to Slide 4.

<table>
<thead>
<tr>
<th>OUTLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reason why we chose this topic</td>
</tr>
<tr>
<td>2. Answers to the questions</td>
</tr>
<tr>
<td>3. Conclusion</td>
</tr>
</tbody>
</table>

Figure 18. Slide 4 (Group 1).

In line 1, Fuyu presented the organization of their oral presentation (Figure 18) by the simultaneous use of the deictic term this and a gesture pointing to the slide (Picture 6.8)—an instance of an environmentally coupled gesture (Goodwin 2007b, 2013).
From a sociocognitive perspective, it is an attempt to facilitate the audience’s alignment to the text information. She then gave an oral explanation of the outline, in which a sequence of the content was signaled by the frame markers first and second (line 2). The correspondence of the verbal frame markers (first, second) and the numbers written on the slides (1, 2, 3) likely enhanced each other’s meaning.

Similarly, in Group 2’s presentation, Hiro jointly used the frame marker first and pointing gestures as he gave a sequenced explanation about how Japanized English words were created as shown in Excerpt 6.8.

Excerpt 6.8 Indicating a sequence (Group 2, Week 14)

1 H: and here are the patterns ((extends LA to Slide 5a [Picture 6.9])) of borrowing. so borrowing means like uh loan words. °okay°
2 J ((clicks the mouse and the word “Abbreviation” appears on slide))
3 H: and ((extends LA to Slide 5b [Picture 6.10])) here first,
4 abbreviation, like rimokon, pasokon, so shortened words
In line 1, Hiro uttered *Here are the patterns* and simultaneously pointed at a slide on the screen (Picture 6.9). On the slide, there was the heading *Patterns of Borrowing* and the rest was blank (Figure 19). He then gave a gloss for the term *borrowing* (*borrowing means like uh loan words*) in line 2—the same explanation strategy as the one used by the teacher in which a brief code gloss (A means B) was embedded in an ongoing explanation without interfering with its flow (See Chapter 4). After Jun clicked the mouse to show the word *Abbreviation* on the slide (Figure 20), Hiro pointed at the slide again (Picture 6.10) and then said *Here, first, abbreviation.* Here, the joint use of the frame marker *first,* the word *Patterns* in a plural form written on the slide, and its blank space likely gave an explicit signal to the audience that a sequenced explanation regarding the patterns would follow.

Moreover, the student presenters also signaled topic shifts within the presentation. Such explicit topic shifts were most obvious when the speakers changed as shown in Excerpts 6.9-6.11.
Excerpt 6.9 Indicating a topic shift (Group 1, Week 14)

F: **next** Sakura will explain about answer of second question

Excerpt 6.10 Indicating a topic shift (Group 1, Week 14)

S: **next** Emi will explain (xx) second question

Excerpt 6.11 Indicating a topic shift (Group 2, Week 14)

H: so **next** uh:: Jun is gonna (.) introduce the ba- uh reasons, social forces, and our (further research) and conclusion

In Excerpts 6.9-6.11, the frame marker *next* was commonly used by the student presenters to indicate a topic shift, which was then followed by an introduction of the next speaker and topic. While these topic shifts by student presenters are not as elaborated as those in textbook and teacher explanations where a brief summary, a comprehension question, and an elicitation question were included (see Chapter 4), they likely make thematic boundaries in the presentations salient and thus promote the audience’s comprehension of the content. Simultaneously, they also signal changes in the roles played by the presenters, that is, other members of the presentation group are positioned as knowers/explainers and get an access to the floor.

When the oral presentations came to an end, the student presenters signaled it as shown in Excerpts 6.12 and 6.13.
Excerpt 6.12 Indicating the end of a presentation (Group 1, Week 14)

E: so in our conclusion, the value of standard Japanese and regional dialect among Japanese people are changing

Excerpt 6.13 Indicating the end of a presentation (Group 2, Week 14)

J: so:: we gonna sum up our presentation

In Excerpts 6.12 and 6.13, Emi and Jun signaled the end of the presentation by a joint use of an adverb so and transitional expressions in our conclusion and sum up, which are metadiscourse markers used for labeling stages in the discourse (Hyland, 2005).

As illustrated above, the student presenters guided the audience through the presentation by frequently using multimodal resources (e.g., talk, slides, gestures) and metadiscourse markers. Such guidance, which was not observed in the students’ explanations in group work (e.g., Excerpts 5.10 and 5.11 in Chapter 5), likely reflects and embodies the explainer-addressee relationship between the student presenters and the audience. That is, the student presenters, who are the primary knowers/explainers in the presentation context, are responsible for organizing knowledge sequentially in a way that the knowledge becomes more accessible to the audience, who do not possess it. In other words, they coordinated multimodal and metadiscourse resources to aid the audience’s alignment with the presentation.
Shaping Content Knowledge

In order to fulfill the role of a presenter, students also need to present propositional knowledge in a way to assist their comprehension. In Chapter 4, the analyses of the instructional discourse indicated that both the textbook author and the teacher packed and unpacked disciplinary knowledge by shifting semiotic resources to use. In Chapter 5, it was observed that students changed the shape of content knowledge under discussion by explaining it at varying degrees of abstraction (e.g., Emi’s two explanations for Fuyu and Sakura) and exploring relations among concepts (e.g., Jun and Hiro’s discussion). In this section, I consider how the student presenters presented propositional content by examining their discourse practices in representing the propositional content of their research findings.

The following three excerpts (Excerpts 6.14-6.16), taken from Group 1’s oral presentation, show how Sakura and Emi reported their findings. The excerpts illustrate a gradual shift in verbal resources they drew on to make propositional claims.

Excerpt 6.14 Reporting research findings (G1, Week 14)
S: [1] we asked in our questionnaire, when you are at your current address, which dialect do you tend to use with your friends and your family. [2] over thirty people out of forty use standard dialects, and only six people said they use (the) regional dialect. [3] in addition we also asked question when you are at current address, which dialect do you tend to use with teachers or at your workplace. [4] over thirty people use (.) uh standard dialect and less than five people use regional dialect. [5] we also asked (the) same question in case of their hometown. [6] twenty people out of forty use standard dialect with friends in their hometown. [7] and fifteen people use regional dialect. [8] on the other hand, uh over twenty
five people use standard dialects uh with teachers or at workplace, because most of people think that standard dialect is more formal than regional dialects. [9] and only ten people use (.uh) regional dialect with teachers or workplace.

In Sentences 1-9, Sakura reported on the questions they asked in their questionnaire, and responses by 40 participants of the questionnaire. Sakura’s utterances in this part of the presentation can be grouped into two patterns. First, when introducing the questions, she used a first-person pronoun we and an action verb in the past tense asked (Sentences 1 and 5). Second, when reporting on the responses, she used third person subjects (e.g., over 30 people out of 40, over 30 people) and an action verb use (Sentences 2, 4, 6, 7, 8, and 9). In both patterns, the content was represented as concrete actions involving human participants (e.g., We asked ..., 15 people use ...).

Then, in Excerpt 6.15, Sakura drew on a slightly different set of verbal resources.

Excerpt 6.15 Reporting research findings (G1, Week 14)

S: [10] so from these ((moves RH)) results, ((shifts body to screen)) most of people ((shifts body to Ss again)) regard regional ((moves RH)) dialect as vernacular and they regard standard as formal language.

In Sentence 10, having signaled a topic shift (so from these results), Sakura presented an interpretive claim regarding the respondents’ perceptions. In doing so, she used a verb denoting a cognitive state rather than actions (regard) and third person subjects (e.g., most of people, they). Moreover, she used disciplinary terms such as vernacular
and formal. This change in the verbal resources to use enabled her to report a sociolinguistic interpretation of their questionnaire results.

Finally, in Excerpt 6.16, Emi, who spoke following Sakura, made a propositional claim that her group had reached as a result of their research.

Excerpt 6.16 Reporting research findings (G1, Week 14)

E: [11] in the past, standard dialect was the important factor to unify Japan as one nation, because Japanese government wanted to make it easy to spread mass education and to catch up with the West. [12] However, recently Japanese people regard regional dialect as one of the tools to show their identity. [13] On the other hand, if standard dialect is compared to regional dialect, standard dialect is still regard as beautiful, formal, utilitarian, and even less interests and tame comp- tame expression. [14] but regional dialect is considered as traditional, warmness and solidarity.

In Sentence 11, Emi used an inanimate subject, standard dialect, to foreground its role in the history of the Japanese language. In Sentence 12, a third person subject, Japanese people, and a cognitive verb, regard, were used. While this utterance is similar to Sakura’s usage (Sentence 10 in Excerpt 6.15), the degree of generalization was increased by Emi’s choice of a more generic term, Japanese people. In Sentences 13 and 14, she presented a propositional claim by using inanimate subjects (standard dialect, regional dialect), the passive voice and the present tense (is considered), and disciplinary terms (formal, utilitarian, solidarity). As a result, sociolinguistic concepts were placed at the center of the claim, not human actors.
Table 21 provides a summary of discursive resources that Sakura and Emi used to represent propositional knowledge in Excerpts 6.14-6.16. As shown, Sakura began the presentation of the propositional knowledge with specific descriptions of concrete actions by themselves and their respondents. She then made an interpretive claim about the respondents’ behaviors represented by the joint use of animate subjects and a verb denoting a cognitive state (regard), and disciplinary terms. Finally, Emi presented a decontextualized propositional claim (i.e., how Japanese people perceive regional dialects and standard Japanese) by using inanimate subjects, the passive voice, and disciplinary terms. Such a shift in the use of discursive resources is likely to make Sakura and Emi’s explanation of the claim more accessible because the audience was first provided with specific, contextualized data, which was gradually transformed into a more abstract claim about what the data can be understood to mean—a similar discourse practice to that in the instructional discourse of the course (See Chapter 4). Moreover, considering that the descriptive explanation of the questionnaire results (Excerpt 6.14) was transformed into a more coherent explanation using transition markers however, on the other hand, and but (Excerpt 6.16), the discourse practices of Sakura and Emi in these excerpts seem to correspond with the developmental stages of explanations (Woodruff & Meyer, 1997).
Table 21. Discursive Resources Used for Representing Propositional Knowledge (Group 1)

<table>
<thead>
<tr>
<th>Data collection method</th>
<th>First-person pronoun we asked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Findings 1 (Questionnaire responses)</td>
<td>Third person subjects (e.g., over thirty people out of forty, over thirty people) use</td>
</tr>
<tr>
<td>Findings 2 (Interpretation)</td>
<td>Third person subject most of people regard</td>
</tr>
<tr>
<td>Propositional claims</td>
<td>Inanimate subjects standard dialect, regional dialect</td>
</tr>
<tr>
<td></td>
<td>Cognitive verbs in the passive voice is regarded, is considered</td>
</tr>
<tr>
<td></td>
<td>Disciplinary terms formal, utilitarian, solidarity</td>
</tr>
<tr>
<td></td>
<td>Transition markers however, on the other hand, but</td>
</tr>
</tbody>
</table>

Furthermore, it was observed that the student presenters frequently used metadiscourse markers when reporting findings, which, in turn, likely resulted in increased explanatory power of their utterances. Excerpts 6.17-6.18 show the use of metadiscourse markers by Emi and Sakura.

Excerpt 6.17 Specifying semantic relations in content knowledge (Group 1, Week 14)

E: according to NHK Bunka Kenkyujo, in 1990s people who moved to Kanto-Kanto area became depression and in- even they committed suicide (.) because they feel the pressure to use standard dialect, however, according to our questionnaire, the image of regional dialect are- have- have been changing positively than the past.

In this excerpt, Emi used metadiscourse markers four times. First, she used according to, an evidential metadiscourse marker which provides support for an argument (Hyland, 2005). Then, she used a transition marker because to provide a reason for a
phenomenon being told in the account. After that, she signaled the introduction of a contrasting view by a transition marker however, and simultaneously clarified its source by the second use of according to. Here it should be noted that Emi’s use of reported speech (according to) likely differs from Jun and Hiro’s use of reported speech in the group work (to, ni yoreba) in Excerpt 5.2. As discussed in Chapter 5, reported speech used by Jun and Hiro appear to have helped them to initiate and participate in their group discussion by allowing them to contribute propositional content to the discussion in someone else’s words. On the other hand, in this instance, considering the context (an oral presentation) and the flow of Emi’s talk, it can be speculated that reported speech was used to enhance the reliability of their research, or explanatory power required in an inter-group context (Woodruff & Meyer, 1997). From a sociocognitive perspective, it can be considered that the reported speech enabled Emi to introduce a new sociocognitive resource, the reference, into the co-cognitive space shared with the audience. Such a move would help the audience to expand the semantic relations in their mental representation of the content knowledge and thus to align to the knowledge being explained by Emi.

A similar use of metadiscourse markers was observed when Sakura presented a conclusion of their research as shown in Excerpt 6.18.

Excerpt 6.18 Specifying semantic relations in content knowledge (Group 1, Week 14)

S: so in our conclusion, the value of standard Japanese and regional dialect among Japanese people are changing. Japanese people regard regional dialect as informal or dirty in the past (.) because Japan needed to unify as one nation. but
today the value of regional dialect has been changing positively. Most people regard regional dialect as envious things or a tool to show their identity. **On the other hand**, standard Japanese is still regarded as beautiful, formal and utilitarian but Japanese people don’t consider standard dialect as their identity.

In this excerpt, Sakura used the transitional marker *because* to present a reason behind people’s perceptions of regional dialects. She then marked her utterance with another transition marker *but* to offer a contrasting view. After pointing out recent changes in people’s perceptions about regional dialects, she highlighted a difference between regional dialects and the standard Japanese by a transition marker *on the other hand*. She also pointed out another aspect in people’s perception about standard Japanese by using *but* again. The use of these metadiscourse markers is likely to make semantic relations in the target content knowledge clear, which in turn can aid the audience’s alignment to the content knowledge.

As illustrated in Excerpts 6.14-6.18, the student presenters elaborated on content knowledge by changing the discursive resources to use, which enabled them to represent propositional knowledge in various forms (e.g., concrete actions by human participants, a decontextualized propositional claim). In addition, they clarified semantic relations in the content knowledge by frequently using metadiscourse markers. Although their explanations of content knowledge were not as elaborated as those in the written papers as shown later, their discourse practices in the oral presentations suggest their ability to coordinate semiotic resources to provide clear and discipline-appropriate explanations under time constraints.
Q&A Sessions

After the student presenters finished their talk, they responded to questions and comments from the teacher and classmates. There were usually a few questions by classmates and oral feedback and questions by the teacher. In this section, I examine exchanges between the student presenters and the teacher because two important aspects, which appear to be expected of students’ explanations of disciplinary knowledge, emerged in the exchanges.

The first aspect concerns explicit elaboration of content knowledge. It was observed that the teacher asked questions to the student presenters, which led them to elaborate on a specific segment of the content they presented. Such interactional scaffolding of elaborations likely supports the claim that the organization and content of explanations is determined by the audience (Forman & Larreamendy-Joerns, 1998). Excerpts 6.19-6.21, taken from Jun and Hiro’s presentation, illustrate how the teacher’s questions and nonverbal signals led Jun to elaborate on the idea of Japanese identity, or open identity as Jun often called it in the group discussions (e.g., Excerpt 5.2 in Chapter 5)—a concept that was hypothesized by Jun and Hiro to be an influential factor for the creation of “Japanized” English words. In the group discussions, however, detailed qualities of the concept open identity appeared to have been left unaddressed.

In the question and answer session, the teacher raised his hand and asked his first question about the idea of Japanese identity.
Excerpt 6.19 Responding to a request for an explanation (Group 2, Week 14)

T: ((raises LH)) I I have one question. I find interesting the idea that
(0.6) like I mean it’s it is the third presentation that we (had about
loan) words and we see how (0.6) it’s interesting in Japan because
there’re many ways of integrating the loan words whether it’s
katakana English or uh all of the different styles of adapting them, but
you said ((looks at his note)) Japanese identity is maybe the most
important and there’s something maybe (. ) special about what
Japan does and then you talked about (. ) you know it’s different for
example from Korean.

J: ((slightly nods))

T: uh can you explain ((extends RH toward Jun and Hiro)) more, what
(I mean) what do Koreans do that’s different. what’s what’s
unique about what (Japanese do)

J: uh (0.8)

H: ((shifts gaze to Jun))

J: I (. ) so (xxx) and uh Yanminho=

T: =((nods))=

J: =she:: fo- she (. ) make some research (. ) about the (0.8) (creating)
patterns ((moves RH)) Korean words ((momentarily extends RH
rightward))=

T: =((nods))=

J: =and (1.0) this uh: (1.2) actually similar patterns they have=

T: =((slightly nods))=

J: =they say rimokon

T: =((slightly nods))=

J: =but they didn’t recreated something. (1.0) like we did it as (x)
ramune.

T: =((slightly moves head upward))=
J: =but we didn’t ((shakes head)) research so (. ) enough
T: ( (nods))=
J: =I’m sorry
T: =okay. ((big nod)) so the idea would be that=
J: =uh but=
T: -=Japan borrows but then also [recreates with (the borrowed
  words.)]
J: [yes. an-
H: [((small nods))]
T: =maybe more than other countries?
H: ((nods))
J: I think so.
T: ( (nods))
J: and the (. ) there are differences about abbreviation. we say (1.6) terebi.
T: =((big nod))=
J =as television. but how do you ((extends RH toward teacher)) say it
T: =uh huh. ( (nods))=
J: =creating abbreviation.=
T: =((big nod))=
J: =so that’s why we think um: like pick up something ((makes a fist
  with RH and moves it inward)) is also ((moves RH downward)) pick
  up- pick up some part of morpheme is also Japanese style
T: =((big nod))=
J: =and also: as I said the most important part is Japanese identity.
((moves RH leftward))
In this excerpt, after giving positive feedback (*I find interesting ...*) in line 1, the teacher mentioned the concept of Japanese identity in line 6 (*You said Japanese identity is maybe the most important*). He then asked *Can you explain more?* (line 11), a typical interactional move by a teacher for eliciting more details from a student (Dalton-Puffer, 2007). In the presentation, the concept was talked about twice by Jun, in the findings section and conclusion. In the findings section, Jun said:

> there are historical, linguistic, social, and other many reasons affect to people, to accept, import, and borrow foreign words and create them as our style. (so) we call it Japanese identity because (. ) uh: as Japanese, we borrow something, and we create it in our way so recreation. this is Japanese identity. so as as Hiro introduced, introduced, so we borrow lemonade and we create ramune. so this is our identity. (From the findings section)

In the above segment, it appears that, in case of language, recreating a new word using one borrowed from a foreign country is regarded as Japanese identity. In the conclusion, he emphasized the importance of Japanese identity in the creation of Japanized English words by saying:

> lastly, uh (. ) we think that (. ) adapting identity Japanese identity is the most important thing to create uh new words in Japanese so ... we borrowed something and we create in our way. so this is the uh best part to (. ) to create new words. (From the conclusion)

Here Jun seems to have supplied the expression *adapting identity*, which was also written on their slide, as an equivalent term to *Japanese identity*. It should be noted that although his two explanations included a description of Japanese identity (borrowing something and (re)creating it in our own way), an example (*ramune*, a soft drink whose name came from *lemonade*), and a paraphrase (*adapting identity*), more elaboration might be needed because an abstract concept with dense content would
require mediation (Escobar Urmeneta & Evnitskaya, 2014; Gajo, 2007). In the question and answer session, after making the request for an explanation (Can you explain more?), the teacher also asked about the Korean style of abbreviation (What do Koreans do that’s different?), which Jun and Hiro mentioned in the presentation, and about the Japanese style of abbreviation (What’s unique about what (Japanese do)?). These two questions in line 12, which could be answered by describing Korean and Japanese people’s linguistic behaviors respectively, seem to be designed to narrow down the scope of, and thus scaffold, the more general request for an explanation Can you explain more? in line 11. These two questions also seem to indicate a teacher’s attempt to help students to appropriate disciplinary discourse by requesting more explicit explanations (Foreman & Foreman & Larreamendy-Joerns, 1998).

Responding to these requests and questions, Jun slowly constructed an extended answer, during which the teacher kept giving signals for Jun to continue his turn with the frequent nods (lines 17, 21, 23, 25, 28, 30). However, Jun was unable to give details enough to earn the teacher’s positive evaluation, or a sanction for an explanation, which is the third step in explanations (Gaulmyn, 1986). In line 31, Jun apologized (I’m sorry). The teacher then asked a reformulated, close-ended question So the idea would be that Japan borrows but then also recreates with (the borrowed words) maybe more than other countries? (lines 32, 34, and 38). It should be noted that as he reformulated the question, he reused the word recreate, which Jun emphasized in his answer (line 26) and thus aligned to him. In addition, the teacher also used an adverb maybe (line 38) to hedge the propositional content of his question. The teacher’s use of hedging is an important aspect of the teacher-student interaction.
in the question and answer sessions and is discussed below. In this segment of the question and answer session, it seems that the teacher demonstrated a disciplinary discourse practice by reformulating Jun’s explanation and simultaneously supplied a model explanation, which in turn would complete the explanation sequence (See Chapter 4 for the discussion on hedging in the instructional discourse). Moreover, it appears that he invited Jun to co-construct the model explanation by forming it as a question as signaled by the rising intonation (line 38). Aligning to the teacher’s invitation, Jun answered *I think so* in line 40 and elaborated on it (*There are differences about abbreviation ..., line 42*) perhaps prompted by the teacher’s nod in line 41. It should be noted that when elaborating his answer, Jun got the teacher involved in the elaboration by eliciting a North American way of abbreviation from him (i.e., TV for television), a strategy that the teacher used in class to co-construct explanations with students. Although Jun was unable to generate an explanation that would earn a sanction from the teacher, the way Jun involved the teacher in the elaboration indicates his ability to use the teacher’s knowledge about North American style of abbreviations, which is a sociocognitive resource available in the environment, in his explanation. After elaborating his idea using the linguistic term *morpheme* in line 50, Jun added *The most important part is Japanese identity*, which initiated a new sequence as shown in Excerpt 6.20.

In Excerpt 6.20, the teacher asked a second question about Japanese identity.

Excerpt 6.20 directly follows Excerpt 6.19.
Excerpt 6.20 Elaborating ideas through comparisons (Group 2, Week 14)

56 T: hm ((briefly shifts gaze down and then to J again)) (an acronym.)
57 ((nods)) I I I (yes) again I think that’s the really interesting part. and
58 but I but uh I think it’ll be interesting to to to make that more precise.
59 like you know what exactly what is the (0.6) Japanese identity
60 ((holds RH and LH)) how does that translate and how is it
different from other countries what other countries do
61 J: uh: other countries (0.5) mind changing their words like Canada do.
62 T: ((nods))=
63 J: =they s- they take some (0.5) policy. (x) policy=
64 T: =((nods))=
65 J: =(x) not to change their words=
66 T: =((nods))=
67 J: =like French ((moves LH)) and=
68 T: =((big nod))=
69 J: =English ((moves RH)) but we didn’t don’t do that
70 T: ((nods))=
71 J: =we: we: ((hits RH with LH several times))
72 H: ((shifts gaze to J))
73 J: =we (3.0) (likely) to borrow some words=
74 T: =((big nod))=
75 J: =some English French Portuguese (some xx)=
76 T: =((nods))=
77 J: =the other countries, (.) and then (1.8) that’s a (xx) we can easily (.)
78 borrow some words,
79 T: ((nods))=
80 J: =and then we didn’t stop there,
81 T: ((nods))=
82 J: =and we recreate something,
84  T:  ((nods))=
85  J:  =and that’s a difference and we didn’t (0.4) °(how can I say)° we
don’t really we don’t [mind changing their- ours
87  T:  (((shifts gaze down, nods, smiles, and gives a
88    big nod)))
89  J:  so that connects to recreation ((moves LH forward)) I think.
90  T:  ((big nod)) (flexibility) and [(borrowing.) ((moves RH and LH
inward))
92  J:  [yeah:
93  T:  flexibility and creating. ((moves RH and LH outward, nods, shifts
gaze to his desk)) interesting. ((shifts gaze to J and H)) good

In Excerpt 6.20, after giving positive feedback in *(that’s the really interesting part)* in
line 57, the teacher gave a suggestion for Jun and Hiro’s written report *It’ll be
interesting to make that more precise* (line 58), thus signaling that precision needed to
be improved in the explanation of Japanese identity. He then asked *What is the
Japanese identity? How does that translate and how is it different from what other
countries do?* (lines 59-61). Considering that he had asked a similar question in
Excerpt 5.19 *Can you explain more (about Japanise identity)?* (line 11), this second
question about the same concept seems to suggest that Jun’s explanation in Excerpt
5.19 did not earn the teacher’s acceptance. Here the teacher’s request for precision and
further questions appear to support the claim that features of acceptable explanations
are determined by the audience (Foreman & Larreamendy-Joerns, 1998). Responding
to this second set of questions, Jun began to construct an extended answer again in line
62 (*Other countries mind changing their words like Canada do*). Notice that he
recycled the expression *other countries* used by the teacher (line 61), which suggests
his alignment to the teacher question (*How is it different from what other countries do?*). While he constructed the extended answer, the teacher signaled him to continue by frequently nodding (lines 63, 65, 67, 69, 71, 75, 77, 80, 82, 84, 87, 88). After Jun uttered *So that connects to recreation I think* in line 89 with a falling intonation, the teacher gave another big nod (line 90) and supplied key words such as *flexibility* and *creating* (line 93). Note that the word flexibility is an abstract noun, which seems to encapsulate the content of Jun’s elaboration in this excerpt (e.g., *We can easily borrow some words, We don’t mind changing ours*). In line 94, the teacher finally said *Interesting. Good*—an assessment, which likely functions as a sanction of the explanation (Gaulmyn, 1986) that Jun constructed through the interaction with him.

The teacher also provided Jun and Hiro with suggestions on their written report.

Excerpt 6.21 occurred toward the end of the question and answer session.

Excerpt 6.21 Earning a sanction for an explanation (Group 2, Week 14)

1. T: so they- I think the interesting question to develop in your your paper
2. would be to explore **why why are certain languages cool versus not**
3. **cool** because cool is a kind of an adjective (.) for feeling (.) uh but
4. **behind that is (this) the real social force.** so why **why is English**
5. **cool** and versus (x) French [German (.) Portuguese are are all (.)
6. languages which have been borrowed
7. J: [uh
8. T: from, and they’re all powerful countries [where
9. H: [((nods))
10. T: or they used to be powerful so that’s not an accident [so **that’s**
11. **social part which you can**
In lines 1-13, the teacher suggested that Jun and Hiro consider in the written report

*Why are certain languages are cool versus not cool* and explore the *social force* behind the people’s perception. In line 14, Jun began to give an answer to the
question: *I think ... why people think English is so cool is as ... and ... presented, we lost World War II and people kind of ... had to think America is better.* In this extended utterance, Jun introduced a new element, *World War II*, which had been addressed in another group’s presentation (*as ... and ... presented*). This indicates that he was able to incorporate content knowledge which was not available in the immediate environment into his online explanation, or in sociocognitive terms, *distributed* knowledge, to generate an explanation. Instead of giving an immediate assessment, the teacher then asked Jun about Japanese people’s current perception about English (*Do you think it’s still like that now?*, line 28). Aligning to the teacher question, Jun said *Yeah ... we still think English is cool* (line 32). After listening to this answer, the teacher finally provided a sanction *Thank you very much* in line 35, thus completing the explanation sequence.

In sum, Excerpts 6.19-21 illustrate an interactional process in which the teacher led Jun to elaborate on his claim and consequently Jun arrived at the idea of *World War II*. In the process, the teacher used various semiotic resources to scaffold Jun’s utterances. First, as noted above, by nodding frequently, the teacher kept on sending nonverbal signals for Jun to keep talking. He also gave verbal clues by uttering *Uh huh* (line 47 in Excerpt 6.19) and *Hm* (line 24 in Excerpt 6.21). Second, he reformulated questions to ask when a previous question did not elicit details at the expected level of elaboration and precision (*Can you explain more?*, *So the idea would be that Japan borrows but then also recreates with (the borrowed words) maybe more than other countries?*). These verbal and nonverbal behaviors suggest that Jun’s elaboration of ideas in these excerpts were interactionally scaffolded by the teacher.
The second aspect of student explanations that emerged in the question and answer session is hedging. As discussed in Chapter 4, hedging enables the speaker/writer to make a claim with caution by leaving room for other interpretations. It was observed that both the author of the textbook and the teacher used hedges when making propositional claims (e.g., they are generally valued, seem to have correlated with, language is often considered, dialects are sometimes considered). Excerpt 6.22 illustrates how the teacher signaled to Emi, Fuyu, and Sakura a need for hedging.

Excerpt 6.22 Hedging a propositional claim (Group 1, Week 14)

1 T: I think it **interesting** to see like you- you have a change in a
2 perception of- of- of the dialect in Japan, which is an important
3 ((moves RH)) finding actually because (. ) dialects are **usually** very (. )
4 important to many many societies, or (we saw that) they are always
5 closely associated to identity but sometimes there’s attitudes about
6 dialects. and attitudes **can** be very strong sometimes. uh: your
7 findings are ((points to the slide)) based on a questionnaire you sent
8 out right?
9 S: and [also]
10 E: [(xx)
11 F: °article°=
12 T: =I see. so uh my question was uh **how confident are you that this is**
13 **really true** uh I know some of you ((extends RA and LA to E, F, S))
14 uh come from outside of the metropolitan region, do you- does does
15 do these findings echo your own feelings, like you feel like your
16 regional dialect is (. ) um more valued than it might have been for your
17 parents’ generation, your grandparents’ generation?
18 E: [hm: ((looks at F and S))

258
F: [hm:]
S: ((looks at E and F))
F: in (.) the survey we conduct (is that) there is many questionnaire-
question, ((moves RH and LH in from of chest)) in the questionnaire,
((slowly moves RH and LH as if a questionnaire form is there))=
T: =um hm ((nods))=
S: =and we: ((holds RH and LH on chest)) we used the (. ) the question-
is (. ) the (. ) um: (2.0) °um° ((shifts gaze to E))
E: ((looks at F))
F: (xx) ((touches chest with RH and LH)) use the questionnaire
((extends RH forward)) a:nd evi- as evidence, we used the article
((briefly extends LA to T)) so=
T: =((big nod)) °um hm°
F: (1.5) um: ((looks at E))
E: ((looks at F))
S: ((looks at F))
F: °na- we° (xx)
E: (xx) I felt confident [about
T: [((big nod))]
E: the result because (. ) my parents or my grandparents feel (. ) like
standard dialect is more like (. ) formal,
T: ((nods))=
E: =but my (. ) parents said my parents used regional dialect at work
places, because they’re staying in Hokkaido,
T: °um hm° ((nods))= 
E: =but (1.0) it’s not- it’s true but I feel sometimes (. ) I’m nervous,
T: ((nods))=
E: =or pressure to use Ja- to use regional dialect=
T: =((nods))=
E: =because still I have the (. ) concept (of) that regional dialect is
informal,

T: ((nods))=

E: =as the questionnaire showed,

T: ((nods))=

E: =so it’s still on the process ((moves RH)) of changing=

T: =((nods))=

E: =the standard dialect and regional dialect (. ) has (. ) shows the identity.

T: ((nods)) I think that’s interesting. yeah I I I agree. It’s probably uh a slow but gradual change, but it’s it’s exciting because it’s good news for for Ainu language potentially, it’s good news for Okinawan language, it’s good news for people who come from (x) regions if it’s slowly changing. it’ll be interesting in twenty years and thirty years, you can think back and say oh yes it has confirmed (or) if the trend is is (. ) getting stronger or not.

After Emi, Fuyu, Sakura finished their talk, the teacher gave positive feedback on their work (I think it is interesting to see like you have a change in a perception of the dialect in Japan, line 1). It should be noted that in his subsequent utterances (lines 3-6, propositional claims were hedged by adverbs and a modal auxiliary (dialects are usually very important to many many societies, attitudes can be very strong sometimes), which is a similar discourse practice observed in the instructional discourse. He then asked How confident are you that this is really true in line 12. Fuyu and Sakura’s utterances in lines 22-23, 25-26, 28-30, 32, 35 indicate their efforts to support their claim by referring to their data collection, that is, their questionnaire and their reading. In line 36, Emi began to provide an extended response. She said I felt confident about the result because my parents or my grandparents feel like standard dialect is more like formal, but my parents said my parents used regional dialect at
work places, because they’re staying in Hokkaido. In this utterance, she referred to experiences of her grandparents and parents and used reported speech (my parents said) to enhance reliability of their research, or explanatory power needed in an intergroup context (Woodruff & Meyer, 1997). While Emi generated her answer, the teacher signaled Emi to continue her turn by nodding frequently (lines 37, 40, 43, 45, 47, 50, 52, 54). Towards the end of her extended turn, Emi made a propositional claim regarding people’s perception of regional dialects, which was not hedged but emphasized the change as a process: it’s still on the process of changing (line 53).

Finally, the teacher gave a positive response I think that’s really interesting. Yeah I agree (line 56), which was followed by his reformulation of Emi’s explanation. Here it should be noted that the teacher’s discourse practice differs from that of Fuyu, Sakura, and Emi, who consistently sought to support their claims by referring to their research and emphasizing certainty (e.g., the survey we conduct …, We used the questionnaire …, I felt confident about …). On the other hand, when the teacher responded to them, his utterances were frequently hedged as shown below.

- It’s probably uh a slow but gradual change
- it’s exciting because it’s good news for for Ainu language potentially
- it’s good news for people who come from (x) regions if it’s slowly changing.

The use of these hedges suggests that the teacher was showing a preferred discourse practice for Emi, Fuyu, and Sakura—making propositional claims with caution.

The student-teacher interactions in Excerpts 6.19-6.22 suggest that the question and answer sessions in the sociolinguistics course were highly dialogic, which would
accord well with the findings of previous on CLIL classroom discourse (Dalton-Puffer, 2007; Llinares & Whittaker, 2010; Nikula, 2010). The teacher interactionally scaffolded the elaboration of content knowledge by the student presenters, and demonstrated how their explanations could be reformulated by hedging the propositional claims. Moreover, these interactions in the question and answer sessions are likely to be the teacher’s attempts to get the students to incorporate the feedback into their written reports as his comment suggests (I think the interesting question to develop in your paper would be to explore ..., line 1, Excerpt 6.21). Thus, it can be said that he interactionally provided feedback on the students’ explanations, which could be used when they write their final reports.

In the first half of this chapter, I have examined the students’ discourse in oral presentations. The examination indicated that the student presenters established the presenter-audience relation and guided the audience through the presentation using diverse semiotic resources. It was also observed that they reformulated the representations of propositional knowledge in their explanations. An analysis of the interactions in the question and answer sessions revealed the dialogic nature of the sessions, in which the teacher led the students to increase precision and modify the strength of claims in their explanations. In the second half of this chapter, I examine the students’ discourse in written reports.
The Written Report Context

The students submitted a written report on their sociolinguistics research project a few days after the completion of the 15-week course. As specified in the course syllabus (Appendix A), the expected length of the written report was 1500 words or more including references. Students had a choice of submitting a team report or an individual report.

The discursive context of written reports differs from that of oral presentations in two important ways. First, the kinds of available semiotic modes are more restricted in written reports. In oral presentations, presenters have access to a greater range of semiotic resources to communicate meaning, such as speech, written and visual texts on slides, notes for presentations, gestures, and facial expressions. For instance, subtle nuances can be communicated by the tone of voice and facial expressions even when hedging expressions are missing in the verbal mode. On the other hand, in written reports, the predominant mode of representation is a written text. It is true that written texts can contain visually organized information such as tables and graphs, but they are usually accompanied by written descriptions and explanations. The predominance of the written mode can create a different kind of challenge than that encountered in oral presentations. Although students might be freed from the pressure of real-time language management that they have to handle in oral presentations, they need to provide elaborated and coherent explanations of propositional content in written texts.

Second, written texts also lead to a difference in preferred rhetorical styles. For example, research shows that explicitness, a wide range of cohesive devices, and hedging are preferred in research articles (Gosden, 1996). The acquisition of academic
writing skills is not an easy task for many students. In fact, it has been reported that writing by undergraduate students often exhibits many features of informal speech (Hinkel, 2002). This means that a mere shift to the written mode is not sufficient. On the other hand, there is also research that found more frequent and varied use of modality (e.g., can, have to) in CLIL students’ written compositions than those by non-CLIL students who learned the same content in their L1 (Llinares & Whittaker, 2010). Considering that the researchers attributed the difference to the dialogic nature of the CLIL classes, which was also observed in the question and answer sessions examined above, it is possible that the teacher-student interactions in the sessions might have had an impact on the students’ rhetorical choices in the written reports.

**Organization of Students’ Written Reports**

Among the seven focal students of this study, Jun and Hiro (Group 2) and Momo and Wako (Group 3) wrote their written reports as a team report whereas Emi, Fuyu, and Sakura (Group 1) chose to write individual reports. Their written reports were generally organized in the following sequence:

1. INTRODUCTION
2. RESEARCH QUESTIONS
3. METHODOLOGY
4. FINDINGS
5. CONCLUSION
6. REFERENCES

First, in the introduction, the students generally described a background (e.g., dialects in Japan, “Japanized” English words) and the reason why they became interested in
the research topic of their choice. Then, research questions were presented followed by a description of research methods. After that, they provided findings, which was the longest section in all five written reports. Finally, they presented conclusions and listed references. A summary of the organization of the written reports by focal students can be found in Table 22.

Table 22. A Summary of the Organization of Written Reports by Focal Students

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Major sections</th>
<th>Word count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emi (Group 1)</td>
<td>The Language Shift in Japan</td>
<td>Introduction Research Q Methodology Findings Conclusion Reference</td>
<td>1,815</td>
</tr>
<tr>
<td>Fuyu (Group 1)</td>
<td>Language Shift in Japan</td>
<td>Introduction Research Q Methodology Findings Conclusion Reference</td>
<td>1,847</td>
</tr>
<tr>
<td>Sakura (Group 1)</td>
<td>Language Shift in Japan</td>
<td>Introduction Research Q Methodology Findings Conclusion Reference</td>
<td>1,466</td>
</tr>
<tr>
<td>Jun &amp; Hiro (Group 2)</td>
<td>Japanized English</td>
<td>Introduction Research Q Methodology Findings Conclusion Reference</td>
<td>1,426</td>
</tr>
<tr>
<td>Momo &amp; Wako (Group 3)</td>
<td>Using Men’s Speech by Women</td>
<td>Introduction Research Q Conclusion</td>
<td>738</td>
</tr>
</tbody>
</table>

**Discourse Practices in Students’ Written Explanations of Disciplinary Knowledge**

In this section, I analyze discourse practices in written reports in order to investigate how the students explained disciplinary knowledge in writing. This section is divided into three subsections: extended introduction, guidance for the reader, and shaping content knowledge. These three subsections correspond with those on oral presentations except for the one on Q&A sessions, and thus help to illustrate similarities and differences between students’ explanations of disciplinary knowledge in the oral and written modes.
Extended Introduction

In the written reports, the students tended to provide a more extended introduction of the topic than in oral presentations. The content usually consisted of a description of background and details about the reasons why they chose the topic, which were not included in oral presentations. Excerpts 6.23 and 6.24 are instances of extended introductions.

Excerpt 6.23 Extended introduction (Sakura, Group 1)

BACKGROUND [1] In Japan, people in different prefectures has different regional dialects. [2] According to Rocketnews24 (‘Rogers’ 2014) Japanese regional dialects is categorized in 8 speeches which are Hokkaido, Tohoku, Kanto, Tyu-bu, Kansai, Shikoku, and Kyushu(Okinawa). [3] In that category, there are several dialects exist. [4] However, people in Kanto area even though people are moved from provinces seem to use "standard"

REASON Japanese. [5] Therefore I was interesting in why they are changing the language in Kanto area and I wanted to find out why, when, where, whom, and how Japanese people shift their codes between regional dialects and standard dialects.

Excerpt 6.24 Extended introduction (Jun & Hiro, Group 2)

BACKGROUND [1] In everyday life, Japanese unconsciously use Japanized words, and the number of these words are enormous and increasing, so we got interested in how these words are created. [2] As African American change English into AAVE, we also use our original language, so we thought it is a
sort of language change. [3] In class the existence of French in Canada was discussed, and the question of Japanese language policy was come up. [4] Therefore, we decided to focus on the creating patterns of Japanese English and borrowing. [5] We interested in this topic because both of us have been abroad to study, and noticed that some words that we thought English is not actually English, so we wonder how these words are created and became a part of Japanese language.

In Excerpt 6.23, Sakura first described background knowledge on regional dialects in Japan (Sentences 1-3). In doing so, she signaled the use of a reference by a metadiscourse marker according to (Sentence 2). Next, after pointing out a linguistic phenomenon that led her group to choose language shift as a research topic (Sentence 4), she wrote Therefore, I was interesting [sic] in why they are changing the language in Kanto and I wanted ... (Sentence 5). As shown in Excerpt 6.24, Jun and Hiro also started with a description of background knowledge associated with their research topic, “English” words coined in Japan (Sentence 1). What differs from Sakura’s introduction, however, is their immediate reference to its impact on their interest (so we got interested in ..., Sentence 1). After that, they presented further background knowledge (Sentence 2), mentioned what they learned in class (Sentence 3), and connected it to their research (Sentence 4). In Sentence 5, they referred to their educational background as another reason why they became interested in the topic.

An important commonality between the two introductions is the restricted use of first-person pronouns. In both introductions, whereas the first-person pronouns I and we were used when the reasons were provided (Sentence 5 in Excerpt 6.23 and the
second half of Sentence 1 and Sentence 5 in Excerpt 6.24), they were not used when the background knowledge was given. An exception is the pronoun *we* in Sentence 2 in Excerpt 6.24, but its referent is Japanese people in general. The rhetorical effect of the restricted use is that the presence of the students as researchers/authors is made invisible in the description of the background—a similar practice to that by the textbook author observed in Chapter 4. Compared to the way the students began the oral presentations, this discourse practice likely helps to construct an increased sense of objectivity in their written reports.

Excerpts 6.23 and 6.24 also indicate a distinctive feature in the students’ discourse practices. As mentioned earlier, in research papers written by scholars and graduate students, it is preferred to establish the relevance of their research by identifying a gap in existing research and thus arguing for novelty (Hyland, 2009). On the other hand, the students tended to foreground their personal connection to the topic or interest in a target phenomenon itself regardless the availability of previous research. For instance, Jun and Hiro included their study-abroad experience as part of the reason why they decided on the research topic. The tendency among the students to refer to their personal connection to the topic thus indicates that the introduction is a section in which students’ discursive practice differs from researchers’ regarding to what extent they reveal their presence in text. Moreover, it might also suggest that students’ personal experience contributes to, or mediates, the development of their academic interest.
Guiding the Reader Through the Text

While the students navigated the audience through the oral presentations by frequently using metadiscourse markers and multimodal semiotic resources, such guidance was not a common practice in their written reports. When an outline of a structure of the paper was provided, it was clustered at the end of the introduction section. As discussed below, this discourse practice by the students was similar to the one by the textbook author as examined in Chapter 4.

Excerpt 6.25 was taken from Sakura’s written report, which contained the only instance of an elaborated guidance for the reader.

Excerpt 6.25 Guidance for the reader (Sakura, Group 1)

[1] this essay will explain about do people switch codes between regional and standard dialects unconsciously or consciously. [2] Then when do people tend to use their dialects versus standard Japanese? [3] Finally, what kind of social factors influenced people's decision when it comes to choosing which dialects they will use?

In Excerpt 6.25, which appeared toward the end of the introduction section, Sakura gave an outline of the paper by listing the research questions to be answered (Sentences 1-3) and clarified the sequence by frame markers then and finally.

Although other students did not provide an outline of their paper, two students (Emi and Fuyu) did present the purpose of their paper in their introductions.
Excerpt 6.26 Guidance for the reader (Emi, Group 1)

Excerpt 6.27 Guidance for the reader (Fuyu, Group 1)

For this paper, we would like to know how, when, and why people shift their languages, choosing to use either a regional dialect or a dialect which is considered as standard in Japan.

In Excerpts 6.26 and 6.27, Emi and Fuyu provided a concise yet clear statement of the purpose of the paper. In both instances, their discourse move was signaled by similar transitional expressions (In this paper and For this paper), and their presence in the text was made salient by the first-person pronouns (I and we).

While it was not a common practice in all of the five written reports, the guidance for the reader in the above excerpts resembles a practice in other written academic discourses. For instance, as shown in Chapter 4, the textbook author provided an overview of the book at the end of its first chapter. In research articles, an outline of the paper can be often found toward the end of its introductory section. Furthermore, Emi and Fuyu’s self-mention is similar to the textbook author’s selective use of I—when indicating topic shifts, she signaled her presence in the text, which was not usually made explicit in the discussions of propositional content. Therefore, it can be said that the students adopted written academic discourse practices in their written reports, with some students adopting more than others.

On the other hand, the scarcity of in-text guidance for readers in most of the students’ reports might be explained by several discursive features of written reports. First, because of their relative shortness in length, such indications of topic shifts
between sections as those observed in the textbook might be deemed unnecessary.

Second, section headings can function as visual indications of thematic boundaries between sections. Among the five written reports, section headings were used in three of them (See Appendix E for Emi’s use of section headings). Third, the sequence made visible by the section headings (e.g., Introductions, Methodology, Findings, Conclusion) largely conform a widely accepted norm in research discourse, which is likely to scaffold comprehension of the organization by readers including the teacher who are familiar with the norm.

Shaping Content Knowledge

In the first half of this chapter, the analysis of the students’ oral presentations revealed that the shifting use of discursive resources made varied representations of content knowledge possible (e.g., specific, contextualized knowledge, abstract propositional claims). It was also indicated that the students clarified semantic relations among concepts by using transition markers. In oral presentations and written reports, even when the same content is explained, the manner in which the content is portrayed and the use of discursive resources are not necessarily the same. In fact, there are differences in oral and written explanations of subject knowledge as reported by Young and Nguyen (2002). Thus, in this section, I examine how propositional knowledge was explained in the students’ written reports by comparing them with explanations in oral presentations.

The following two excerpts were taken from Jun and Hiro’s oral presentation and written report. Excerpt 6.28 shows Jun’s oral explanation of abbreviation. Excerpt
6.29 is a section about the same topic in their written report. When Jun and Hiro worked on the written report, they divided the work and the primary author of this section was Jun.

Excerpt 6.28 Jun’s oral explanation of abbreviation (Group 2, Week 14)

J: [1] first one is abbreviation. [2] (these are) basically uh shorten words and in short people (.). people basically like short words so Japanese (.). uh and from linguistic view, morpheme this is the uh smallest part of word, so peo-Japanese picked up some parts of morpheme and combined it. so for example rimokon. and abbreviation is created.

Excerpt 6.29 Jun’s written explanation of abbreviation (Jun & Hiro, Group 2)

[1] The first choice is abbreviation. [2] This is basically shorten type of words such as Remocon and Pasocon. [3] These words are often thought as just short version of words, but we found the theory of creating abbreviation words in Japanese. [4] According to Oshima. H who is a linguist at NINJAL, the key factor of this is morphene. [5] Morphene is the smallest part of each words. [6] For example, remote controller can be broken down into remote/control/ler, and small part of two morphenes are picked up to create new word. [7] We can assume that picking up two or more small part of morphenes is the way of creating abbreviations in Japanese. [8] On contrary, North Americans have their own way to create abbreviation words. [9] Looking at one example, they say television as TV. [10] North American way of creating abbreviation may vary from Japanese one. [11] It can be assumed that morphene is a key to make abbreviation in many countries, but there is a difference between Japan and other countries.

When these explanations are compared, important differences can be found between the two. First, regarding the content, the explanation in the written report has more
elaborated propositional content than the one in the oral presentation. For instance, the references to the linguist Oshima and to the North American approach to making abbreviations were not included in the oral presentation. In the newly added content, a source of data was indicated (According to Oshima, H who is a linguist at NINJAL, the key factor of this is morphene), and the North American approach to making abbreviations was explained with an example (On contrary, North Americans have their own way to create abbreviation words. Looking at one example, ...). These details are likely to raise the rhetorical credibility of the explanation in the written report and to clarify how the Japanese style of abbreviation works.

Second, the use of discursive resources is different between the two explanations. One of the differences is the use of the passive voice. Although it is used in Excerpt 6.28, too, the written report has more instances of the passive voice (e.g., These words are often thought, remote controller can be broken down). The increased use of the passive voice changes the representation of propositional knowledge. For example, the verb phrase pick up, which was used in the active voice in the oral presentation, was expressed in the passive voice in the written report:

- Japanese picked up some parts of morpheme and combined it (Oral presentation)

- small part of two morphenes [sic] are picked up to create new word (Written report)

In the oral presentation, due to the joint use of the active voice and an animate subject Japanese, the process of abbreviation was represented as an action involving human
participants. On the other hand, the use of the passive voice, the present tense, and an inanimate subject *small part of two morphenes [sic]* resulted in a more objective representation of the process because no human participants were included in the depiction. Such a difference in the representations of a target phenomenon between the spoken and written explanations is similar to the difference between textbook and teacher explanations observed by Young and Nguyen (2002) and in Chapter 4. Another difference between the two explanations regarding discursive resources is the use of hedging. Whereas the explanation in the oral presentation had one instance, the one in the written report contained five instances of hedging:

- people *basically* like short words (Oral presentation)
- This is *basically* shorten type of words (Written report)
- These words are *often* thought … (Written report)
- We *can* assume that picking up two or more small part of morphenes [sic] is … (Written report)
- North American way of creating abbreviation *may* vary from Japanese one (Written report)
- It *can* be assumed that morphene [sic] is a key to… (Written report)

Because hedging allows room for other interpretations, it creates a rhetorical effect that the claims are made with caution (Hyland, 2009). Moreover, in the two explanations, different metadiscourse markers were used. In the oral presentation, only a topic shift marker *so* and a transitional expression *for example* were used. On the other hand, in the written report, a wider variety of metadiscourse makers were used (e.g., *according to, on (the) contrary, but, such as*). In sum, a comparison of Excerpts 6.24 and 6.25 suggests that the propositional content was represented as more
objective knowledge and presented carefully with increased details and nuance in the written report.

Similar features can be found in other explanations than those by Group 2. The following two excerpts were taken from the oral presentation and written paper by Fuyu. In these excerpts, she explains findings on people’s code-switching behaviors.

Excerpt 6.30 Fuyu’s oral explanation of people’s code switch (Group 1, Week 14)

F: [1] we asked a question. [2] have you ever noticed that you change your dialect when you speak to someone. ((changes slides)) [3] as you can as you can see, eighty- hm fif- fifty eight percent of Ja- people co- changed code unconsciously. [4] but if we divide into metropolitan and province, we can find a big difference regiona- metropolitan and province. ((changes slides)) [5] at first (0.5) we (2.0) at first when you look at the graph of metropolitan, you can find only 4 people out of 21 said yes. [6] that means they change codes consciously. [7] the four people are from Chiba. [8] from this result we guess that people who have been staying metropolitan, they don’t feel they have regional dialect. [8] on the other hand, please (.) please look at this graph. ((briefly shifts gaze to screen)) [9] it show most people in province change their codes consciously. [10] especially those who moved to another area of Japan.

Excerpt 6.31 Fuyu’s written explanation of people’s code switch (Fuyu, Group 1)

[1] We asked a question: Have you ever noticed that you change your dialect when you speak to someone? [2] According to our questionnaire we asked, 58 percent of people change codes unconsciously. [3] However, if we divided into metropolitan and province, we can find see a big difference between
people who live in metropolitan and province. [4] The result of metropolitan shows that only 4 people out of 21 said yes, that means they change codes consciously. [5] In addition to that, the 4 people are from Chiba. [6] On the other hand, the result shows that most people in province change their codes consciously, especially those who moved to another area of Japan. [7] From this result, we guess that people who have been staying in metropolitan, they don’t feel they have regional dialects while people who have hometowns in province change their codes because they think standard dialect is more formal language than other dialects.

First, as in the case of Group 2, the content was more elaborated in the written report than in the oral presentation. For instance, in the written report, Fuyu explained in the last sentence why people who moved to the metropolitan would change their codes (because they think standard dialect is more formal language than other dialects).

Second, Fuyu used more diverse metadiscourse markers in the written report (e.g., according to, however, in addition to, while, on the other hand, while, because). These metadiscourse markers help to make semantic relations in the text clear. Third, the two explanations exhibit a shift from interactional resources to non-interactional, verbal resources:

- As you can see, 58 percent of people changed code unconsciously. (Oral presentation)
- According to our questionnaire we asked, 58 percent of people change codes unconsciously. (Written report)
- When you look at the graph of metropolitan, you can find only 4 people out of 21 said yes. (Oral presentation)
- The result of metropolitan shows that only 4 people out of 21 said yes. (Written report)
In the oral presentation, Fuyu uttered *as you can see* and *when you look at the graph* to draw the audience’s attention to slides. These expressions are oriented toward the audience of the presentation and thus interactional. On the other hand, in the written report, she replaced them with *according to our questionnaire* and *the result of metropolitan (group) shows*. These expressions are likely to be more self-explanatory because they do not ask for the participation of the audience/reader as the utterances in the oral presentation did. Thus, these observed features indicate that the representation of content knowledge is more explicit and has greater explanatory power in the written report than in the oral presentation.

Finally, it should be noted that the use of hedges interactionally scaffolded by the teacher in the question and answer session was partly adapted by Fuyu. The following sentence was taken from the beginning of the findings section in her written report.

- After reviewing the literature and the data we collected for this project, we found that the attitudes against dialects are changing slightly.

In this sentence, Fuyu hedged the propositional claim, which her group developed based on their reading and data, with the adverb *slightly*. As discussed in the above section on the question and answer sessions, when the teacher commented on this part of their findings, he asked *How confident are you that this is really true* (line 12, Excerpt 6.22) and repeatedly hedged related claims by a modal auxiliary and adverbs (e.g., *... attitudes can be very strong, It’s probably a slow but gradual change*..., in Excerpt 6.22). Although it was the only instance of the use of a hedge for this
propositional claim in the written reports by Fuyu, Emi, and Sakura, it was observed that Emi and Sakura incorporated hedges into their discussion of other propositional content. The following sentences were taken from their written reports.

- There might be some reasons to contribute to the shift. (Emi, Group 1)
- However, we can imagine that some regional dialects might be disappeared in the future because the influence of the standard dialect is very strong. (Emi, Group 1)
- When language shift occurs, it is almost always shift towards the language of the dominant powerful ... (Sakura, Group 1)

Although the impact of the teacher feedback on their use of hedging cannot be proved, it can be speculated that they were beginning to develop competence in the disciplinary discourse, that is, a careful presentation of propositional claims, which can be linguistically constructed by the use of hedges.

**Summary**

In this chapter, I analyzed the students’ discourse in the oral presentations and written reports in order to answer the two sub-questions of the third research question. Regarding Research Question 3b, *In their oral presentations, how do students draw on tools and affordances to discursively organize their presentations and interactively align them with their audience?*, the findings indicate that the student presenters coordinated multimodal resources such as slides and gestures to guide the audience through the presentation and drew on diverse discursive resources to make the content knowledge available to the audience. For instance, they used third person subjects and
action verbs to report on their findings and used inanimate subjects, the passive voice, and disciplinary terms to make propositional claims based on the findings. They also used metadiscourse markers to clarify semantic relations in the propositional knowledge. These discourse practices, which are similar to those observed in the instructional discourse of the sociolinguistics course (Chapter 4), are likely to reflect the addressee-orientation of explanations (Gaulmyn, 1986) and aid the audience’s alignment with the propositional content. Furthermore, it was indicated that the teacher interactionally provided his feedback on the students’ presentations in the question and answer sessions, to some of which the students aligned to and produced more discipline-appropriate explanations (e.g., elaboration, increased precision).

With respect to Research Question 3c, How do students align various tools and affordances in the process of writing explanations in their final reports, and how are these explanations discursively organized in their final reports?, the findings indicate that although there was variation among them, the students’ written reports exhibited features of written academic discourse. More specifically, some students wrote extensive introductions, in which they provided the description of the background of their research while rhetorically keeping their presence invisible in the text. In addition, most students guided the reader through the texts by using metadiscourse markers. Furthermore, they represented propositional knowledge as more objective knowledge than in the oral presentations, and this contrast between the spoken and written explanations corresponds with the one observed in the instructional discourse examine in Chapter 4 and in Young and Nguyen (2002). It was also indicated that they used more hedges than in the oral presentations. The increased use of hedges might suggest
that the students were beginning to develop competence in, and thus were aligning to, disciplinary discourse, that the teacher repeatedly demonstrated in the lessons and the question and answer sessions. The development of student explanations of disciplinary knowledge is discussed in Chapter 7.
CHAPTER 7
DISCUSSION

In this chapter, I summarize and discuss the key findings of the study. This chapter is divided into two parts. In the first half, I consider the organization and discourse practices of explanations in the instructional discourse of the sociolinguistics course by examining findings of Research Questions 1 and 2. In the second half, I consider how the students’ explanations of disciplinary knowledge evolved through their participation in the course project (Research Question 3) by examining answers to the three sub-questions.

Explanations in the Instructional Discourse of the Sociolinguistics Course

In this study, two research questions about explanations of disciplinary knowledge in the instructional discourse were posed to investigate the discursive context of the students’ experience with the subject: How are explanations of disciplinary knowledge organized in a course textbook? (Research Question 1), How are explanations of disciplinary knowledge by the teacher organized and presented? (Research Question 2). As discussed in Chapter 4, the analyses of the course textbook (Holmes, 2013) and the lessons indicated that the explanations of the subject knowledge in the instructional discourse were organized in a way that would make the knowledge accessible to novice learners. For instance, the scope of the discipline was clearly laid out in the first chapter of the textbook and the second and third lessons of the course. In addition, the topics were likely sequenced in the general order of
saliency (e.g., the explanation of regional dialect preceded that of social dialect).

Moreover, the students were likely exposed to widely accepted knowledge in the field as indicated by the extensive overlap of content between other introductory-level sociolinguistics textbooks and the course textbook (Holmes, 2013). These features seem to support the claim that undergraduate textbooks provide “a coherently ordered epistemological map of the disciplinary landscape” (Hyland, 2009, p. 112). In other words, the textbook is “the accumulative product of a history of building frameworks for knowing the world” (Goodwin, 2013, p. 16) in the field, and the lessons also reflect and embody disciplinary views of the world. Considering that the textbook and the course are targeted at neophytes, the attempts to clearly define the domain are likely to be instrumental in socializing the students into the discipline. However, this does not mean that the textbook and the lessons are mere reproductions of disciplinary views of the world. As discussed in Chapter 4, the teacher’s selection of examples revealed his orientation toward the students (e.g., geographic distance between Osaka and Tokyo in Excerpt 4.19). In the textbook, the author acknowledged that she “cleaned up” examples used in the book for novice learners (Holmes, 2013, p. viii).

Such addressee-orientation (Dalton-Puffer, 2007; Gaulmyn, 1986) indicates that the explanations in the instructional discourse are mediated by the author and the teacher, which would likely facilitate the students’ alignment to the explanations because the complexity in an explanandum and the distance between the students and the explanandum are reduced in the addressee-oriented explanations.

The analyses of the discourse practices in the textbook and teacher explanations of dialects—a commonly addressed topic in the field and a topic chosen
by one focal group of this study—indicated that the textbook author and the teacher explicitly signaled topic shifts using metadiscourse markers such as move to, so far, and now (Excerpts 4.1, 4.2, 4.3). Such explicit topic shifts signal, or identify, the next explanandum in the discourse, which is the first step in the construction of explanation sequences (Gaulmyn, 1986). From the sociocognitive perspective, it can be speculated that an explicit topic shift is likely to function as an affordance to help the students to align to an upcoming explanation sequence because it draws the students’ attention to the new explanandum. In the case of teacher explanations, it was also observed that topic shifts were often accomplished through interaction with the students. For instance, he asked the students comprehension and elicitation questions (Excerpts 4.3, 4.4), as a result of which the students were constructed as co-participants in the topic shifts. Such interactional discourse practice by the teacher is supportive of the findings of previous research that teaching in CLIL classes tends to be dialogic (Dulton-Puffer, 2007; Llinares & Whittaker, 2010; Nikula, 2010). Moreover, when announcing a topic shift, he used an inclusive pronoun we, which enabled him to create “a social situation of acting together to learn” or joint agency (Ogborn et al., 1996, p. 23) in the class discourse. In sociocognitive terms, the use of we, a solidarity expression, likely reveals the teacher’s emotional alignment to the students (Nishino, 2017) and his attempt to help them align with his explanation.

The analyses of the instructional discourse also indicated that textbook and teacher explanations contained transformations of disciplinary knowledge in which the knowledge was represented at different degrees of abstraction. There were two patterns in which representation of disciplinary knowledge was transformed in the
instructional discourse. In the pattern in which specific examples were transformed into abstract disciplinary knowledge, the textbook author gradually shifted the discourse resources used. For instance, when describing a contextualized example, the author used the second person pronoun you (When you answer the telephone, you can often ..., Excerpt 4.5), thus rhetorically constructing the readers as subjective participants (Young & Nguyen, 2002) in the target phenomenon. On the other hand, when she later presented a propositional claim drawn from the example, she used inanimate subjects (e.g., The evidence discussed indicates that the social class someone belongs to is generally signaled by ...)—a discourse practice which constructs objectivity in the text (Young & Nguyen, 2002). Specific examples were transformed into dense academic knowledge in the lessons, too. When the teacher explained the term isogloss, he started an extensive explanatory sequence with a sociolinguistic survey in which the students were involved as subjective participants (Young & Nguyen, 2002) (Excerpt 4.6). On the other hand, when he later introduced the term isogloss, he said These are sometimes called glosses by the way, those lines that separate ... (Excerpt 4.7) using the passive form—an utterance in which meaning is decontextualized without an explicit reference to specific human participants. These findings indicate that the textbook author and the teacher represented disciplinary knowledge at different degrees of abstraction in the process of transforming specific examples into abstract propositional claims. Such diverse representations of disciplinary knowledge appear to be an essence of disciplinary explanations of sociolinguistic phenomena.
In the other pattern of textbook and teacher explanations, abstract knowledge was unpacked through exemplification. For instance, a textbook explanation of regional dialect (Excerpt 4.14) contained an exposition followed by two examples. In this sequenced explanation, the exposition was constructed with noun phrases denoting abstract entities (*Sometimes the differences between dialects are a matter of the frequencies with which particular features occur, rather than completely different ways of saying things*), whereas an example that followed was constructed with third person subjects and action verbs (*People in Montreal, for example, do not always pronounce the l in phrases like il pleut and il fait*). Similarly, the teacher explanation of levelling (Excerpts 4.18 and 4.19) started with a presentation of the abstract term and was followed by specific examples (e.g., a bulldozer which levels the ground). Thus, disciplinary knowledge was represented at various degrees of abstraction in these textbook and teacher explanations too. This teacher explanation of levelling was sequenced in the order of: the presentation of a key term, a question, the first example, code gloss, the second example, an exposition, and clarification. In this process, target domain knowledge was repeatedly transformed.

The above findings indicate that the textbook and teacher explanations involve repeated reformulations of propositional knowledge, forming a cycle of abstraction and contextualization. Considering the discourse practices examined in Chapter 4, the cyclical process in which a specific example is transformed into an abstract disciplinary claim (Excerpts 4.5, 4.6, 4.7) and vice versa (Excerpts 4.14, 4.15, 4.18, 4.19) might be an essence of explanations in instructional discourse. Especially when the explanandum involves dense knowledge that requires more mediation (Escobar
Urmeneta & Evnitskaya, 2014; Gajo, 2007), such cyclicality in explanations would be instrumental in promoting the students’ understanding of domain knowledge because it can give them a guided trajectory of experience with target knowledge involving “multiple repetitions in slightly varying contexts” (Atkinson et al., 2007, p. 177).

**Student Explanations of Disciplinary Knowledge**

In this study, in order to investigate students’ explanations of disciplinary knowledge in a course project, the following research question was posed: *How do students' explanations of disciplinary knowledge evolve as they work on a course project?* (Research Question 3). The examination of student discourse in group work, the oral presentations, and the written papers in Chapters 5 and 6 seems to indicate three aspects of changes that occurred in the students’ explanations of disciplinary knowledge. The first aspect concerns the internal structure of explanations. In Chapter 4, it was indicated that textbook and teacher explanations of disciplinary knowledge involved transformation of disciplinary knowledge at various degrees of abstraction. In the student explanations, similar transformation was observed. For instance, Emi, Fuyu, and Sakura’s hypothesis about people’s code-switching behavior was repeatedly transformed in their two meetings (Excerpts 5.1, 5.3, 5.10, 5.11, 5.14). In the first meeting, Emi and Fuyu transformed Emi’s experiential knowledge into the L2 term *intimate*. In the second meeting, Emi transformed the term *intimate* into a noun phrase *(An unable-to-speak-when-finding-Tokyoites syndrome*, Excerpt 5.10) and into an extended explanation involving two specific examples (Excerpt 5.11). In this second
meeting, the content that Emi explained was further transformed into noun phrases such as *group of feeling* and *social distance* (Excerpt 5.14).

Considering that there are few instances of student explanations in teacher-led class discussions (Dalton-Puffer, 2007), the findings might indicate that student explanations involving such transformation of knowledge are more likely to occur in group work than in teacher-led discussions. A possible contributing factor to this difference might be the relatively equal status among the participants in group work. According to Dalton-Puffer (2007), interactants are more likely to be explicit about non-understanding when they are more equal. This seems to have been demonstrated by Fuyu and Sakura’s explicit signals of non-understanding (*Why did we write shinmitsusa*? in line 7, Excerpt 5.10 and *What? What is it? What does it mean?* in line 17, Excerpt 5.11). Even if they were not equal in the amount of knowledge regarding their research topic, it is very likely that the gap was much smaller than that between them and the teacher, thus putting them in a relatively equal relationship. Thus, it can be speculated that the relative equal relationship among Emi, Fuyu, and Sakura made it possible for Fuyu and Sakura to explicitly signal their non-understanding, which in turn led Emi to produce the two explanations.

Another possible contributing factor to the emergence of the student explanations in group might be the tightly shared cognitive space. When Emi and Fuyu could not come to an agreement in their first meeting, they established a tightly shared cognitive space by mutual gaze (line 8, Excerpt 5.1). This seems to have allowed the meaning-based discussion in which Emi explained her fear of people using a metaphoric gesture (McNeill, 1992) and through syntactic reformulation of her
previous utterance. Because a tightly shared cognitive space likely affords more intensive semiotic work among interactants (Atkinson et al., 2007), it might create a more suitable context for students to manipulate representations of propositional content.

The second aspect of changes in the students’ explanations concerns the developmental stages (Woodruff & Meyer, 1997). The examination of the students’ discussions in Chapter 5 revealed that some of their explanations changed from descriptive ones to relational and then complex ones. For instance, when Jun and Hiro wrote propositional content regarding their research topic on the whiteboard, their talk was largely descriptive consisting of unconnected conceptual entities such as hypothesis, patterns, open identity, borrowing, and interference (Excerpts 5.2 and 5.4). After that, they explored how the ideas might be related to each other and in doing so they produced relational language (e.g., This includes this, line 7, Excerpt 5.5). Finally, as they explored connections among the ideas, more complex language emerged (e.g., in the process of and under the influence of in Excerpt 5.9). The trajectory of the development of Jun and Hiro’s interpretative talk corresponds with the developmental stages of explanations proposed by Woodruff and Meyer (1997)—the description of objects, the elaboration of relations among variables, and an explanation of a complex target phenomenon. The multimodal analysis of their interaction suggests that such development was afforded by their ability to coordinate diverse semiotic resources. For instance, they structured the environment of the group study room by bringing in their smartphones, with which they accessed the handout from another professor (Picture 5.9). They also adapted the environment for their discussion by producing the
written texts on the board, which allowed them to extend their co-cognition into the public space. The written texts, in turn, provided them with “a locus for shared work” (Goodwin, 2013, p. 16) where they explored conceptual connections by the joint use of talk and environmentally coupled gestures (Goodwin, 2007b, 2013).

The third aspect concerns changes in the students’ roles in the explanations. In Chapters 5 and 6, it was indicated that the roles played by the students in explanations of propositional knowledge changed within and across contexts. For instance, Fuyu’s roles changed within group work from an addressee of Emi’s explanation (Excerpt 5.10) to a co-explicator of a joint explanation for Sakura (Excerpt 5.11). Similarly, Sakura’s roles changed from an addressee of Emi’s second explanation (Excerpt 5.11) and to an active participant in the subsequent discussion (Excerpt 5.14). Moreover, in the oral presentation and written paper, they fulfilled the roles of a co-presenter and a solo author, respectively, which were afforded by the setting (i.e., an oral presentation and a written paper). Here, what is important is that the students expanded their repertoire of participation in explanations of disciplinary knowledge. Whereas students tend to remain addressees of teacher explanations or to be led to become a co-author of teacher explanations (Dalton-Puffer, 2007), the framework of the course project likely enabled the students to experience a wider variety of roles in the explanation sequences. It should be noted that such changes in their roles were supported by continuity—a form of pedagogical scaffolding (van Lier, 2004)—of the project. In the continuity of their project work, they gradually took over roles with increased responsibility.
CHAPTER 8
CONCLUSIONS

In this chapter, I briefly summarize the findings of the study, discuss the theoretical and pedagogical implications of the study, discuss the limitations of the study, provide suggestions for future research, and provide final comments.

Summary of the Findings

This study aimed to reveal processes in which students engaged with disciplinary knowledge and discourse in a CLIL setting. Data were collected in a sociolinguistics course where Japanese university students learned the subject in English. Findings of multimodal discourse analyses on the data illuminated various aspects of teaching and learning in the course. First, both textbook and teacher explanations exhibited their orientation towards learners. They used varied discourse resources to make disciplinary knowledge accessible to students. Moreover, the teacher used interactional and multimodal semiotic resources to unpack the meaning of disciplinary knowledge for his students. In the sociolinguistics research project, the students engaged in a series of tasks which afforded them opportunities to participate in interactions with their group members. They collaboratively generated ideas, developed their understanding, and constructed extended explanations of their newly learned knowledge. Analyses of their explanations indicated their shifting use of discursive and multimodal semiotic resources, which enabled them to represent content knowledge in various forms depending on the discursive context.
Theoretical Implications

Informed by a sociocognitive approach to SLA (Atkinson, 2002, 2010, 2011), I investigated how undergraduate students engaged with disciplinary knowledge discourse as they worked on a course project in a CLIL course. Many of the findings seem to support the assumptions of the approach. First, the students dynamically structured their environment to adapt it to their group work, as indicated by the establishment of co-cognitive space between Emi and Fuyu (Excerpt 5.1) and the production of written texts by Jun and Hiro (Excerpt 5.2). The active and dynamic structuring of the environment (Atkinson et al., 2018) likely helped them to initiate and advance their discussion. Second, the students increasingly coordinated sociocognitive resources during group work. For instance, Jun and Hiro jointly used talk, the written texts on the board, and environmentally coupled gestures (Goodwin, 2007b, 2013). These multimodal actions enabled them to extend their cognition (Atkinson, 2010) into the environment, make their conceptual understanding publicly visible, and build their subsequent actions on the shared perceptual ground. This sequence of actions likely helped them to develop their understanding about their research topic and advance their discussion. Third, they increasingly aligned to each other in group work. For example, after hearing Emi’s explanations about why the term intimate was chosen as a candidate social factor of code switching (Excerpts 5.10, 5.11), Fuyu and Sakura increasingly aligned to Emi, each other, and a topic under discussion as indicated by the increase in the number of turns, latching, and overlap (Excerpt 5.14). In this process, Sakura, whose utterances were limited at the beginning (Excerpts 5.10, 5.11), began to take the lead in the discussion and explained her
interpretation using new examples (Excerpt 5.14). These behaviors indicate Sakura’s increased participation in and contribution to the group discussion. Thus, these findings likely support key notions of sociocognitive research such as *structuring the environment* (Atkinson et al., 2018), *extended cognition* (Atkinson, 2010), and *alignment* (Atkinson et al., 2007).

### Pedagogical Implications

Findings of this study have two important implications for pedagogy. The first concerns the environment for learning. It was observed that when the students engaged in group discussions, they drew on a wide variety of sociocognitive resources such as a proposal template, a model assignment by previous students, a handout from another class, and a whiteboard. These tools likely enabled the students to initiate and move forward their discussion. Moreover, as van Lier (2004) pointed out, flexible seating arrangements are likely to facilitate students’ meaning making activities because such flexibility allows students to dynamically adapt the environment to their ongoing activity, which in turn will help them advance their work. Thus, creating an environment with diverse sociocognitive resources and flexibility will support students’ participation in and engagement with a task.

The second implication is task sequence. It was observed that the students’ active engagement with disciplinary knowledge was afforded by a closely tied sociocognitive space in group work. By securing a shared cognitive space, they engaged in active and dynamic multimodal interaction, which in turn likely led to a mutual understanding and a better understanding of a topic under discussion. As
discussed above, inter-group tasks such as an oral presentation in front of the whole class can be challenging for students because there is reduced continuity in their sociocognitive space, which requires more work in navigating the audience’s attention and attaining their understanding. Thus, it might be helpful to give students opportunities to work in a context where it is relatively easy to establish a shared cognitive space even when it is an inter-group context. For instance, if students are given an opportunity to sit together with another group to rehearse their presentation with necessary sociocognitive tools around them (e.g., print outs of their slides, pictures, graphs), they would be able to practice coordinating the tools to help the audience follow, or align to, their presentation.

**Limitations**

There are five limitations to this study. First, the data were collected at one tertiary institution. Thus, the findings are likely to have been influenced by the educational context of the institution including the students’ familiarity with group work, oral presentations, and written reports. Although the specificity is an important quality in this study because it allows informed interpretations of data, a wider range of insights will be available if similar studies are conducted at other institutions.

Second, the data came from limited discursive contexts: the course textbook, teacher lectures, group work, oral presentations, and written papers. Although the range of contexts in which the data were collected is likely wider than many studies on student discourse, the students’ learning was not limited to these contexts. For instance,
research articles that the students read for the course were not included in the study despite its potential impact on their discourse.

Third, it is likely that the students’ participation in other classes influenced their project work in this course. For instance, some of the focal students were taking a seminar on sociolinguistics at the time of data collection. However, data were not collected in other related courses that the focal students might have been taking.

Fourth, the same level of precision could not be maintained throughout all of the analyses. Fine-grained examinations in multimodal interactional analyses are complex and time-consuming. As a result, although the findings reported here illustrate important aspects of instructional and student discourses, they are not as comprehensive as I would like them to be.

Fifth, the large amount of time required for data analysis occasionally resulted in delays in follow-up interviews. Therefore, it is possible that access to some data was lost due to the delays. For instance, some student participants might have forgotten details of their activities, which they might have remembered if the interviews had been conducted sooner.

**Suggestions for Future Research**

There are several points that need to be considered in future research. First, it is important to conduct similar studies at other institutions. As pointed out above, it is likely that findings reported here were influenced by the educational context of the university where data were collected. By collecting data at institutions which vary in
terms of students’ educational background and English proficiency, researchers can amplify the insights provided by this study.

Second, future studies will benefit from analyses of data collected in wider discursive contexts. If students are taking related courses such as a seminar and a content course on a similar topic, it will be beneficial to collect some data in those classes, too (e.g., the content of the courses, observation data).

Third, it will be beneficial to conduct multimodal interaction analyses on data collected in other types of classes (e.g., non-CLIL/CBI English classes, L1 content classes). By studying multimodality in instructional and student discourses in other types of classes, researchers will be able to better understand features of multimodal discourse in classes where a content subject is taught in FL.

**Conclusions**

In recent years, teaching academic subjects in FL has gaining popularity. Reflecting the trend, there are an increasing number of textbooks, publications, and workshops on CLIL for university students in Japan. However, there is still a shortage of research indicating us how content and language are learned in classes where content subjects are taught in FL at the university level. How do students use language in a CLIL course? How do they use language to work with content knowledge? How do other semiotic resources help students’ content and language learning? These questions motivated me to start this study. Multimodal interaction analyses on the data collected for this study revealed students’ rich semiotic activities in and out of the classroom. Although this study has several limitations as discussed above, I hope that
the findings reported here help researchers to better understand the ways in which students work with content knowledge and language and to create an environment that can support learning for future students.
REFERENCES


304


doi:10.1007/BF02463030


APPENDIX A

THE SYLLABUS OF THE SOCIOLINGUISTICS COURSE (Spring 2015)

INTRODUCTION TO SOCIOLINGUISTICS

Professor: ________________

Class schedule: Tuesdays 10:40 AM – 12:10 AM, Thursdays 10:40 AM – 12:10 AM
Room: Classroom:_____
Office hours: By appointment
(Please email me should you wish to meet to discuss matters related to the course)

Description
Does the society we live in affect how we speak? Does the way we speak change society? Must men speak differently than women? How might speech styles help some people stay rich while keeping others poor? Should we be worried about foreign words and phrases changing our language(s)? How much do the words we choose to use reveal about who we really are? Why are languages around the world disappearing and what can we do about it? Are standard/"correct” versions of languages better than regional dialects of those languages?

The above questions are at the heart of human communication and are of interest to anyone interested in the complex ways that language functions as one of the key components of human communication and social activity. This course focuses on research and documented examples, drawn from a variety of languages around the world, of how language reflects and constructs social structures, social roles, and power relationships, both at the level of narrowly defined interpersonal relationships and at the broader level of speech communities, nationally and internationally. In seeking to answer the above questions, this course will provide a broad overview of the field of sociolinguistics while also offering students a chance to focus and work on exploring the linguistic dimensions which underlie a social topic of their choice. Students will come away from this course with a greater awareness and interest in how one can question and study the impact that languages have on national policy and education as well as in the workplace and in their personal lives.

Course objectives
The goal of this course is to provide students with opportunities to:
• Gain in-depth knowledge on topics related to the study of language and society
• Identify and discuss both theoretical and practical issues in the field of sociolinguistics
• Become familiar with some of the different techniques used to study sociolinguistics
• Develop the ability to analyze language samples to identify social markers
• Develop the ability to conduct, interpret, and report research both in oral and written forms
• Develop problem solving, critical thinking and cooperative work skills through readings and class discussions
• Develop academic discourse/language in the subject area of sociolinguistics and applied linguistics
• Develop a deeper knowledge of how all human activity is embedded in language practices which reflect and reinforce sociohistorical forces, constructs and identities
• Develop and explore insights about their own experiences with language use and language learning

**Online Course Management Tool**
As in many other courses offered at ________, materials and supplementary activities related to the course content will be made available through the use of an online course management tool. The tool to be used for this class will be EDMODO. The URL address for the online course management tool is: https://www.edmodo.com. The access code to register for the class is: ____.

I will also make use of NEARPOD in class to help create interactive activities. The app will allow us to interact and participate in activities through your tablets and phones. You can download the Nearpod app for android of IOS phones. You can also use your laptops to interact with Nearpod.

**Participation and attendance**
Students are expected to be present for each class and to complete the readings and come ready to discuss these and participate actively in class. To facilitate your participation consider taking notes about the following when you are doing a reading for the class.

• Are there sections from the reading that you find particularly interesting? Highlight it and talk about it in class or with me.
• What ideas discussed in the reading do you agree or disagree with? Why?
• How does the reading relate to language learning theory?
• What are the implications of a specific concept (or concepts) for you as a Japanese university student
• How would you apply what you have learned from this reading to your own language learning? Your own personal life?

Attendance regulations will follow those outlined by ________ University. If you cannot attend class on the day of an exam or on a day when you are scheduled to make a presentation, please notify the professor in advance. A doctor’s certificate is required to make up a missed test or presentation. Absences due to nonmedical causes (family emergency, etc.) must also be documented.
In the event that you should miss a class, students are responsible for acquiring notes and materials either from classmates or the Edmodo site.

This course will be conducted in seminar format. You are expected to take an active part in all class discussions and activities and come to class prepared to express and discuss your opinions. I also encourage everyone to contribute actively to the creation of a positive class environment by:

- Supporting your classmates (listening actively in class (no sleeping please), asking questions, being respectful and helpful with fellow students both in and out of the classroom)
- Helping to maintain an environment which maximizes chances of English language development by trying to speak and use English as much as possible in class

Assignments are due on the designated dates. Late assignments will be penalized significantly (-10% per day).

The use of laptops and other electronic devices in class is to be restricted to coursework. Inappropriate use of these devices in class (instant messaging, e-mailing, surfing the Internet, playing games, working on assignments for other classes) will be noted and will affect your final grade.

**Academic integrity / Referencing styles**
All students are strongly encouraged to consult the document entitled ‘Beware of Plagiarism’ available on the web at the following address:
http://www.studymyway.com/study-resources/beware-plagiarism/. Please consult with the instructor about any doubts or questions you may have about using and referencing sources prior to handing in assignments. For this class, you must make use of the APA (American Psychological Association) referencing style for your citations and your final page of references used in your assignments. To learn more about the APA Referencing style refer to (http://www.library.mun.ca/guides/howto/apa.php). A video about APA is also available here: https://www.youtube.com/watch?v=gGtkh_-9OC0&feature=youtu.be. You can also use the website https://www.citethisforme.com/ which can help you produce well formatted APA references (for instructions on how to use the cite, please click here).

**Required textbook / readings**
Readings for the class lectures will be drawn primarily from the following textbook:

The book can be purchased at the ______ bookstore. You can also order it online (ex. amazon.co.jp).

Additional readings (articles, websites) will also at times be distributed in class and/or through the online course management tool Edmodo. Should you discover a reading which you think would be of interest for others in the class, please feel free to share information about the reading with me and on the Edmodo course site.

**Suggested alternative textbooks for further readings**


**Suggested website and tv series to look at:**

- https://sites.google.com/a/sheffield.ac.uk/all-about-linguistics/branches/sociolinguistics
- http://www.pbs.org/speak/
  - This site contains very interesting examples and readings related to the TV series: “Do you speak American”. There are three episodes to the series. These can be viewed here:
    - Episode 1: http://www.youtube.com/watch?v=NBXVPerzYqk
    - Episode 2: http://www.youtube.com/watch?v=_4Kis5TEEMw
    - Episode 3: http://www.youtube.com/watch?v=O78S7Ls-yr8

**Calculation of Final Mark**
The following course components will contribute to your final mark:

**CALCULATION OF FINAL MARK:**
Reading quizzes 5%
Reflective questions 25%
Midterm exam 20%
Sociolinguistics proposal 5%
Sociolinguistics presentation 10%
Sociolinguistics research paper 10%
Final exam 25%
Total 100.00%
Reading quizzes
Throughout the semester, a large part of the quality of the discussions and the interactions which will occur in the classes will depend on making sure that everyone has read the assigned readings for each week’s topics. To encourage everyone to keep up with the readings, reading quizzes asking questions about the general ideas found in the readings will be given throughout the semester. These will be given randomly in each section over the semester. Your scores on these quizzes will be used to determine 5% of your final mark.

Reflective questions
Reflective questions based on the class lectures and readings will be assigned regularly to complete at home throughout the course. These questions are designed to help you progress step-by-step through the course content, reflect upon what you have read and learned, as well as move forward in your thinking of how the course content applies to your own personal lives.

The questions will be posted and submitted on Edmodo on a weekly basis so that you can share your ideas with others. Although the questions will typically be designed so that they can be completed in one sitting, what you submit must show that you have completed the work in a thoughtful and serious manner (sloppy, unedited/unformatted, rushed assignments will not count for marks). The length and format of the posting needs to be adequate (replies of only a few words or sentences which do not make sense or which contain obvious errors of language will not be appropriate). However, I am most interested in the quality of the posts. In approximately 1 to 2 paragraphs (max 300 words) your goal should be to answer the question as clearly and as honestly as possible. Completing the readings from the textbook assigned throughout the semester as well as the activities conducted during the lectures will help you complete the reflection questions. You are also encouraged to integrate ideas from other students in your reflection posts.

By sharing everything on Edmodo, you will: a) practice your writing, b) build a sense of community, c) integrate real world experience with course materials and d) create an opportunity to share ideas in a more relaxed and quiet way than through face-to-face classroom interactions. Twice throughout the semester, you will be asked to submit a compilation/portfolio of your reflection questions. Each time, the portfolio will be evaluated for its completeness and the quality of the postings. The following criteria will be used to evaluate the portfolio:
- Were the reflection questions submitted on time?
- Formatting: The portfolio should be clean and well written and organized). The portfolio should have a cover page and each reflection question should be clearly identified with a title and the date when the reflection was posted on Edmodo).
- Quality of the ideas and arguments presented
- A completed self reflection sheet to be included with the portfolio
The two volumes of the portfolio will be worth 20% of your final mark. 5% will also be assigned to reflect your overall participation and contribution to discussions on Edmodo through replies and messages to peers throughout the semester (i.e., did you reply to others and encourage interesting and valuable discussions)

Sociolinguistics research project

Over the duration of the semester, you will be asked to create a team (2 students) and identify a research question of your choice related to sociolinguistics to which you would like to find an answer. You will then do research to try and find the answer to this question. As part of this work you will need to submit the following components:

1. a research project proposal on May 12th worth 5% of your mark identifying
   o a) your team members
   o b) your topic of interest
   o c) a specific question about this topic
   o d) a hypothesis regarding what you believe the answer to the question will be
   o e) at least one academic source which you think you can use to answer your question.

2. a presentation worth 10% of your mark. This brief presentation will allow you to share publically with your peers at the end of the semester what you have discovered and learned about your chosen topic of interest. Each team will have 15 minutes to talk about their research. This will be followed by questions and feedback from the class. The PowerPoint for the presentation will also be posted online and will be used to help determine your presentation mark. The presentations will begin on July 9th. It is anticipated that feedback received on your presentation will help you finalize your written report.

3. a written report worth 10% of your mark. This report to be submitted at the end of course (due date: July 31, 2015). It should be no more than 1500 words in length and should include citations and references to sources used to summarize what you have learned about the topic that you have chosen to research. This written report can be submitted as team OR individual reports can be submitted for students desiring an individual mark.

4. a peer evaluation report - Each team member will be asked to evaluate their partner and his or her contribution to the work completed for the realization of the sociolinguistics project. Please note that poor participation on the part of a team member will reduce the mark assigned to that specific team member. This evaluation will be submitted at the same time as the written report.

Use of Edmodo

In addition to serving as our course management system, Edmodo will serve as an online collection of semester work and can be used as a forum for you to share and test ideas with other students in the class. Please feel free to use it for this purpose and to share questions and insights you have throughout the semester. Research teams will each be assigned to a unique Edmodo group which will also allow groups to
collaborate online at a distance and ask me specific questions they may have in a more private way.

Midterm and Final exam
There will be two examinations in this course: a mid-term examination on June 9th, worth 20% of the final mark and a final examination at the end of the course worth 25% of the final mark. These pen-and-paper exams will test your mastery of the course content and skills addressed in this course.
APPENDIX B

INFORMED CONSENT FORM FOR STUDENTS

研究参加に関する同意書
Tomoko Fujimura
____________________ / Temple University, Japan

This consent form explains the study. Please read it carefully, and ask questions where you do not understand.
この同意書は研究の概要を説明するものです。よく読んで、分からない箇所はぜひ質問をしてください。ご質問は、藤村朋子までお願いいたします (fujimura-t@xxxxxxxxxx）。

Purpose of the study: To study how L2 learners learn academic discourse in content-based English education
研究目的：内容重視の英語教育において、L2 学習者がどのようにアカデミックな言語使用を学ぶかを探る

Procedures (Sources of data collection) データ収集の内容
(1) Class observations 授業観察
(2) Background survey 参加者情報アンケート
(3) Audio/video-recordings of activities in class including group presentations of the sociolinguistics research project 授業の音声/ビデオ撮影（The sociolinguistics research project のグループ発表を含む）
(4) Documents submitted as part of the course requirements such as the sociolinguistics research project proposal, the written report of the project, answers to reflection questions, and written answers in the mid-term and final examinations 授業で提出する課題（プロジェクトプロポーザル、プロジェクトレポート、Reflection questions への回答、中間および期末試験での記述回答など）
(5) Audio/video-recordings of group project work outside class (e.g., group discussion, preparation for group presentations) プロジェクトのための授業外グループ活動の音声/ビデオ撮影（話し合いやプレゼンテーション準備など）
(6) Notes and materials prepared for the project プロジェクトのために作成したノートや準備資料
(7) Interviews (approximately three thirty-minute interviews) インタビュー（30 分×3 回程度）

Confidentiality プライバシーの保護
Your individual privacy will be maintained in all written and published work and presentations resulting from the study. Confidentiality of records identifying the participant will be maintained by the use of pseudonym. I will keep all of this information in a safe place.
The data gathered will not be used for any purpose other than for academic purposes. 参加者のプライバシーは、この研究結果を報告する論文・口頭発表などいずれの場においても守られます。収集されたデータは、偽名を使用することにより特定の個人と限定できないようにします。データは安全な場所に保管し、学術的目標以外のいかなる目的にも使用しません。

**Voluntary participation 参加の自由**
Your participation is voluntary and is not related to your evaluation of the course. You are free to stop participating in the research at any time. If you decide not to participate, no information related to you will be included in this study. 参加は自由であり、この授業の成績評価には一切関係ありません。途中で研究への参加を止めることもできます。参加しないことによりした場合、あなたに関する情報が本研究に含まれることはありません。

**Potential benefits to participants 参加者への利益の可能性**
Although you will not benefit directly from participation in this study, the research will give you opportunities to reflect on your learning, to share your ideas about learning in a content-based English course with other participants, and to learn how to conduct a research study in the field of education. 本研究へのご協力により、参加の方々に直接的な利益は生じないと考えられます。ご自身の学習について振り返ったり、他の参加者と内容重視の英語教育における学習について話したり、教育分野における研究方法を学んだりする機会を提供できると考えられます。

**Compensation for students who participate in Data Collection (5), (6), and (7)データ収集（5）、（6）、（7）にご参加いただける方々への謝礼**
A gift certificate of 3,000 yen will be offered in exchange of your participation upon completion of the data collection in August, 2015. ご参加への謝礼として、2015年8月のデータ収集完了後に三千円相当のギフト券を進呈いたします。

**Your consent to participate in this study 研究参加への同意**

<table>
<thead>
<tr>
<th>Initial イニシャル</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I agree to participate in this research on content-based English education conducted by Tomoko Fujimura. この研究への参加に同意します。</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>2a. I agree to be audio-recorded during class activities. 授業内活動の録音に同意します。</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>2b. I also give permission for Tomoko Fujimura to use the audio-recordings of in-class activities for academic purposes only. 授業内活動の録音データが学術的目標にのみ使用されることに同意します。</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>3a. I agree to be video-recorded during class activities. 授業内活動の録画に同意します。</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>
3b. I also give permission for Tomoko Fujimura to use the video-recordings of in-class activities for academic purposes only.
授業活動の録画データが学術的目的にのみ使用されることに同意します。

4a. I agree to be video-recorded when I and my partner(s) meet for the sociolinguistics research project outside class, to provide notes and materials for the project, and to be interviewed. (Interviews will be arranged according to your schedule.)
パートナーと授業外でプロジェクトのために活動する際の録画、プロジェクト用資料の提供、インタビューに参加することに同意します。（インタビューは参加者のご都合を優先して設定されます。）

4b. I also give permission for Tomoko Fujimura to use the video-recordings of out-of-class activities for academic purposes only. 授業外プロジェクト活動の録画データが学術的目的にのみ使用されることに同意します。

Video-recordings will be used in publications and presentations. If necessary, video-recordings of whole-class activities will be processed for protecting participants’ confidentiality. If you participate in Data Collection (5), video-recordings of your group project work will be used in publications and presentations. You will be consulted in advance regarding the use of the video data of your group project work. 録画データは、論文や口頭発表に使用されます。クラス全体の録画データは、参加者個人が特定されないよう、必要な場合は加工をします。データ収集（5）にご参加くださる方々には、グループ活動の録画データの使用に関して事前に相談し、参加者の方々の了承を得た上で、論文・口頭発表で使用いたします。

If you have any other conditions regarding the use of the data provided for this study, please specify them below. 提供されたデータの使用に関して、他の条件などがある場合は下に書いてください。

I understand that my participation in this study is voluntary, and that I may withdraw from this study at any time by contacting Tomoko Fujimura (fujimura-t@xxxxxxxxxx). この研究への参加は自由意志に基づくものであり、藤村朋子(fujimura-t@xxxxxxxxxx)に連絡することにより研究への参加をいつでも止めることができることを理解しました。

I understand the information given to me, and I have received answers to any questions I have about the study. I understand and agree to the conditions of this study.
この研究についての説明を理解し、質問への回答を得ました。この研究に参加することに同意します。

I confirm that I have received a signed copy of this consent form.
この同意書の署名付き写しを受け取りました。
Thank you very much for your participation. ご協力ありがとうございます。
INFORMED CONSENT FORM

Tomoko Fujimura
fujimura-t@xxxxxxxxxx
___________________ / Temple University, Japan

Purpose of the study
The purpose of the study is to gain understanding of how students learn academic content and language in a university-level content and language integrated learning course. The focus of the study is the process of students’ learning during a group research project. Data collected in the study will be used for research purposes only. This study will be written up as my doctoral dissertation.

Data collection
Materials that I would like to use for my study are: a) student background questionnaire, b) audio/video-recordings of activities in class including a few non-project lessons, in-class group work and group presentations of the sociolinguistic research project, c) audio/video-recordings of students’ group work outside class, d) the course syllabus and class handouts, e) documents submitted by students as part of the course requirements, i.e., the sociolinguistics proposal, the sociolinguistics research paper, and answers to reflective questions, mid-term and final examinations, f) notes and materials prepared by students for the sociolinguistic research project, g) your feedback on students’ assignments, i.e., the sociolinguistics proposals, sociolinguistics presentations, sociolinguistics research papers, answers to reflective questions, the mid-term and final examinations, h) transcripts of interviews with students, i) transcripts of interviews with you as the teacher of the course, and j) my in-class observations.

Confidentiality
The information that I use to write this study will be kept confidential. I will keep all of the information in a safe place and ensure that I am the only one to know who wrote or said the information that I use in this study. All participants and institutions will be assigned pseudonyms in any publications or presentations resulting from this study.
Your rights as a research participant

Your participation is voluntary. You may ask me questions about this study at any time and I will answer your questions to your satisfaction. You may decide not to participate and you are free to stop participating in the research at any time.

Your consent to participate in this study

1. I agree to participate in this research on content and language integrated learning conducted by Tomoko Fujimura. _______ _______

2a. I agree to be audio-recorded during classes. _______ _______

2b. I also give permission for Tomoko Fujimura to use the audio-recordings of classes for research purposes only. _______ _______

3a. I agree to be video-recorded during classes. _______ _______

3b. I also give permission for Tomoko Fujimura to use the video-recordings of classes for research purposes only. _______ _______

4. I agree to be interviewed by Tomoko Fujimura (approximately three one-hour interviews). _______ _______

I understand the information given to me, and I have received answers to any questions I have about the study. I understand and agree to the conditions of this study.

If you have any other conditions regarding the use of the data provided for this study, please specify them below.

____________________________________________________________________
____________________________________________________________________

I understand that my participation in this study is voluntary, and that I may withdraw from this study at any time by contacting Tomoko Fujimura (fujimura-t@xxxxxxxxxx).

I confirm that I have received a signed copy of this consent form.

_________________________________________     ___________________

Name of Participant (please print)

_________________________________________     ___________________

Signature of Participant     Date
Name of Researcher

__________________________
Signature of Researcher Date

Thank you very much for your participation.
APPENDIX D
BACKGROUND QUESTIONNAIRE

Thank you so much for participating in my research. Could you please answer the following questions? Your answers to the questions will help me better understand your experience in learning English and sociolinguistics.

<table>
<thead>
<tr>
<th>Question</th>
<th>Response Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Name</td>
<td></td>
</tr>
<tr>
<td>2. Year (Please circle one)</td>
<td>Junior • Senior</td>
</tr>
<tr>
<td>3a. Email</td>
<td></td>
</tr>
<tr>
<td>3b. Would it be okay to contact you by email? (e.g., to explain about my research, to ask questions about your project) (It will not take more than 5 - 10 minutes to reply.)</td>
<td>Yes • No</td>
</tr>
<tr>
<td>3c. In which language would you prefer to receive emails?</td>
<td>Japanese • English</td>
</tr>
<tr>
<td>4. Your first language (Please circle one)</td>
<td>Japanese • Other (                  )</td>
</tr>
<tr>
<td>5. When did you start learning English?</td>
<td></td>
</tr>
<tr>
<td>a. When you were 12 or 13 years old (Grade 1 in junior high school)</td>
<td></td>
</tr>
<tr>
<td>b. Other: ________ years old</td>
<td></td>
</tr>
<tr>
<td>6. Your current age years old</td>
<td></td>
</tr>
<tr>
<td>7. Do you have English learning experiences other than in your junior high school, high school, and university? (If yes, please describe your experience below.)</td>
<td>Yes • No</td>
</tr>
<tr>
<td>8. Years of experiences abroad: E.g., How long 1 month, When 19 years old, Where Vancouver, Canada: Purpose to study English</td>
<td></td>
</tr>
<tr>
<td>• How long ________, When ________, Where ________, Purpose ___________</td>
<td></td>
</tr>
<tr>
<td>• How long ________, When ________, Where ________, Purpose ___________</td>
<td></td>
</tr>
<tr>
<td>• How long ________, When ________, Where ________, Purpose ___________</td>
<td></td>
</tr>
<tr>
<td>• How long ________, When ________, Where ________, Purpose ___________</td>
<td></td>
</tr>
<tr>
<td>9. Your current best scores of English proficiency tests</td>
<td></td>
</tr>
<tr>
<td>TOEFL (PBT • CBT • IBT) ________ TOEIC ________</td>
<td></td>
</tr>
<tr>
<td>EIKEN ____________________ Other ____________________</td>
<td></td>
</tr>
<tr>
<td>10. How many (course title) have you taken? (Please circle one)</td>
<td>0 • 1 • 2 • 3 • 4</td>
</tr>
<tr>
<td>11. Are you taking other courses related to sociolinguistics now?</td>
<td>Yes • No</td>
</tr>
<tr>
<td>If yes, please fill out the chart below.</td>
<td></td>
</tr>
<tr>
<td>Title of the course (J or E)</td>
<td>Language of instruction</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>i.</td>
<td>Japanese · English</td>
</tr>
<tr>
<td>ii.</td>
<td>Japanese · English</td>
</tr>
</tbody>
</table>

12. Have you taken courses related to sociolinguistics? Yes · No
If yes, please fill out the chart below.

<table>
<thead>
<tr>
<th>Title of the course (J or E)</th>
<th>Language of instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>i.</td>
<td>Japanese · English</td>
</tr>
<tr>
<td>ii.</td>
<td>Japanese · English</td>
</tr>
</tbody>
</table>

😊 Thank you very much 😊
APPENDIX E

TWO EXAMPLES OF STUDENTS’ FINAL PAPERS

<Emi’s Final Paper (Group 1)>

Language shift in Japan

1. Introduction

I searched about language shift in Japan with my group members. Language shift means the language which people speak in a society slightly change from one language to another one. The language which is taken place is a low variety or minority language in many cases. Many people might consider Japan as a monolingual community, however, there are many varieties of Japanese language: dialects. Dialects are different varieties or codes of Japanese because they have different features such as vocabulary from Tokyo dialect. In this paper, Tokyo dialect is called the standard dialect because Tokyo dialect is regarded as a standard Japanese by majority of Japanese people today. Many Japanese people shift their language from their own regional dialects to the standard dialect, especially among the younger generation. There might be some reasons to contribute to the shift. According to Carroll (2001), the standard dialect is still regarded as correct and formal code while regional dialects are considered as a tool to show tradition, feelings, and human relations today in Japan. The attitudes toward the standard dialect and regional dialects might contribute to the language shift in Japan. In this paper, I will explain how and why the language shift has been happening in Japan based on three books and our survey. It is important to know about language shift in Japan because language is connected to our identity.

2. Research Question

We decided to ask ourselves three questions for this paper.
1. Do people switch between regional and standard ways of speaking unconsciously or consciously?
2. When do people tend to use their dialects versus "standard" Japanese?
3. What kinds of social factors influence people's decision when it comes to choosing which dialect they will use?
We decided to explore these four questions because we are interested in how and why people shift their codes. Although people can interact by using their regional dialects, they shift their codes, especially those who moved to metropolitan. In this paper, metropolitan means Tokyo, Chiba, Kanagawa, and Saitama. We assumed that there might be some social factors. I would have liked to find what kind of social factors contribute to shift people’s codes.

3. Methodology

To answer the four research questions, we did two things: 1) We read three books, and 2) We conducted a survey about their use and attitudes of standard and regional dialects. First of all, we made questions for our survey and we posted on Facebook and LINE to answer it by our friends, family, and teachers. While we were waiting for the answer collected, each of us read three books. We shared the information from each book after reading individually. We analyzed the answers collected and why people answered so by using the books we read.

4. Findings

From the data we collected through the survey and the literatures, we found that the value or the attitudes toward the standard and regional dialects have been changing after reviewing the survey and the three articles we read.

The first argument to support our answer is based on the data we collected through our survey. The first question is whether people switch their codes between the standard and regional dialects consciously or unconsciously. In the survey, we asked: Have you ever noticed that you change your dialect (switching between "standard" Japanese or your regional dialect), when you speak to someone? 32% of people answered yes to the question, and 58% answered no. 5% of the people answered that they now realized they change their codes, and another 5% answered nothing. The majority of people have not noticed that they change their codes. However, the percentages are different if we divided the participants into two categories; metropolitan and province. When we looked at the result of people who is in metropolitan, we can find only 4 people out of 21 said yes, and that means they change their codes consciously. The 4 people are from Chiba. We can assume that those people probably have regional dialects of Chiba. The majority of people in metropolitan feel they do not have a regional dialect and they think they speak the standard dialect. This result does not mean they have not noticed that they change their codes. It probably means they speak only one dialect, the standard dialect. On the other hand, when we looked at the result of people who are from province, we can find
that they change their codes consciously, especially those who moved to another area of Japan. The majority of people from province change their codes consciously even though they are staying in their hometown.

The second argument to support our finding is also based on the data from our survey and the literatures. In the survey, we asked: a) When you are at your current address, which dialect do you tend to use with your friends and your family?, b) When you are at your current address, which dialect do you tend to use with teachers or at your workplace?, c) When you are in your hometown, which dialect do you tend to use with your friends and your family?, and d) When you are in your hometown, which dialect do you tend to use with teachers or at your workplace? These data are used to answer the question 2: When do people tend to use their dialects versus "standard" Japanese? For the question a) in our survey, over 30 people out of 40 use the standard dialects, and only 6 people said they use their own regional dialects. From the answers for question b), over 30 people use the standard dialect, and less than 5 people use their regional dialects. Most of people use the standard dialect at the current addresses. It probably because the current addresses are metropolitan for most of people. Some people have been living their hometown in metropolitan and other people moved to metropolitan from their hometown. On the other hand, when we asked the question c), 20 people out of 40 use the standard dialect with friends in their hometown and 15 people use their regional dialects. Moreover, over 25 people answered they use the standard dialect with teachers or at workplaces for the question d). From these results, we concluded that many people use the standard dialect at current addresses, metropolitan in the most of the case, and at school or workplaces in hometown. In addition, many people use their regional dialects when they are in hometown and use it especially to their family or friends. According to Carroll (2001), the standard dialect is regarded as formal, correct, beautiful, polite, stiff, insipid, and bureaucratic while regional dialects are regarded as warm, expressive, of the common people, for among friends, having depth, and gentle. Regional dialects are used to show the solidarity, and the standard dialect is used as a utilitarian code.

The third argument to support our findings is also based on the data from our survey and the literatures. We asked several questions to know how the people think about the standard and regional dialects. First, when we asked: When you hear people speaking a regional dialect, what your reaction? You can choose one more choice. 1) It is something I am envious of. 2) It is not cool. 3) It shows their identity. and 4) Other. No one answered 3) It is not cool and majority of people chose 1 or 2. From the result, we can assume that the values
and attitudes toward regional dialects are positive. However, there are gaps of the values and attitudes between some regional dialects. When we asked them: Of all the different regional dialects spoken in Japan, which ones do you think is the most interesting?, out of 40 people, 8 people answered Okinawa dialect and 7 people answered Kyoto dialect. The reason why people chose Okinawa dialect is simple, because they think it is unique. On the other hand, the reason why people chose Kyoto dialect is because it sounds cute and well-educated. According to Carroll (2001), it is probably because Kyoto has a prestige as an old capital city of Japan. We can assume that this prestige as an old capital city is the biggest reason for people to choose Kyoto dialect, not Osaka dialect although both Kyoto and Osaka are the same religion.

In the past, regional dialects were regarded as slovenly, bad, incorrect, and inferior in contrast to the standard dialect (Carroll, 2001). The Japanese government needed the one dialect to make it easy to spread mass education and to catch up with the West. This might contributed to the people’s values and attitudes toward the two codes in the past. However, today, Japanese people regard regional dialects as one of the tools to show identity.

5. Conclusion

This research project aimed to explore about language shift in Japan. We had three questions to try to explore: 1) Do people switch between regional and standard ways of speaking unconsciously or consciously? 2) When do people tend to use their dialects versus "standard" Japanese? and 3) What kinds of social factors influence people's decision when it comes to choosing which dialect they will use? Our research allowed us to note that the values and the attitudes toward the standard and regional dialects have been changing. As we reflect on the completion of this report, we believe that the information we discovered is important because we use Japanese language everyday as a tool to communicate. As we understand the values and attitudes toward the two codes, we might be able to know how we can maintain regional dialects. Although regional dialects have been valued positively, the standard dialect has strong influence and prestige as a formal code. People from province change the code to the standard dialect when they moved to metropolitan as we expected. However, the reason is not only the pressure, but also the strong influence and the prestige of the standard dialect.

We now believe that somehow we can maintain regional dialects because many people value regional dialects positively. However, we can imagine that some regional dialects might be disappeared in the future because the influence of the standard dialect is very strong. We
can now hear the standard dialect everywhere and every time through TV programs. One possible way to maintain regional dialects is that to use or introduce regional dialects on TV programs. It would be interesting and important to explore how we can maintain regional dialects in the future.

References List


Appendix

1. How old are you?
2. What is your gender?
3. What is your hometown in Japan (Where did you spend majority of your time during your childhood)?
4. Did you eventually move away from your hometown?
5. If you say YES, please indicate in what city your currently reside.
6. Do you feel that you have a regional dialect linked to your home region?
7. Do you like your dialect? (whether you speak a regional or a standard dialect)
8. Have you ever noticed that you change your dialect (switching between "standard" Japanese or your regional dialect), when you speak to someone?
9. In what situations do you change your dialect?
10. Why do you change your dialect?
11. Please explain why you feel the way you do about your dialect.
12. When you are at your current address, which dialect ("standard" Japanese or your regional dialect) do you tend to use with your friends?
13. When you are at your current address, which dialect ("standard" Japanese or your regional dialect) do you tend to use with teachers or at your workplace?
14. Please explain why you tend to use your dialect in the way indicated above.
15. When you are in your hometown, which dialect ("standard" Japanese or your regional dialect) do you tend to use with your family or friends?
16. When you are in your hometown, which dialect ("standard" Japanese or your regional dialect) do you tend to use with your teachers or at your workplace?
17. Please explain why you tend to use your dialect in the way indicated above.
18. When you hear people speaking a regional dialect, what is your reaction? You can choose one more choice.
19. Of all the different regional dialects spoken in Japan, which one(s) do you think is the most interesting?
20. Why do you think the dialect(s) you chose is(are) the most interesting?
21. Of all the different regional dialects spoken in Japan, which one(s) do you think is the least interesting?
22. Why do you think the dialect(s) you chose is(are) the least interesting?
23. If you could speak any regional dialect spoken in Japan which one would you like to be able to speak?
24. Why do you would like to be able to speak the dialect you chose in question 21?
< Momo and Wako’s Final Paper (Group 3)>

Research Project

[Topic]
Using men’s speech by women

The reasons why choose this topic;
– Japanese language has many differences between men’s speech and women’s speech. When I was an elementary school student, I used boy’s speech and many people around me said it is bad, then I have a question why using men’s speech by women is considered bad.

- I wondered why if women use men's speech, it sounds bad.

[Question]
Why is using men’s speech by women considered bad?

We choose this question because we feel unfair and uncomfortable to being considered that women use men’s speech is bad.

[Answer]
We read two books and some article on the Internet to answer this question.
We used two example sentences to explain it;
A.お前の食ってるパン、うまそうじゃね？

B.あなたの食べているパン、おいしそうじゃない？
This sentence is spoken by women. Women’s speech is more polite and correct than men’s speech.

Each sentence means “The bread which you are eating looks delicious doesn’t it?”
We separated sentence A into 4 sections, ①お前、②食ってる、③うまそう、④じゃね and explain each.

①お前
お前 means "front of Buddha". It was polite word before but Japanese people tend to avoid using direct expression. After Meiji era, お前 became vernacular word.

②食ってる
The word “食べ” has some meanings, and in this sentence, this word means eat something. This word is a casual form of “食べる”. In former times, people used “食べる” generally, but
この言葉は、時がたっても、下品に思われて、"食べる"に置き換えられました。 日本の諺には、この言葉が使われ、これには置き換えられません。例の「蓼食う虫も好き好き」(There is no accounting for tastes)

③うまそう
“うまい”は多義的で、この文脈で、この言葉は、美味そうであることを意味します。この言葉は、日常用語であり、この言葉の敬語形式は“おいしい”または“おいしそう”。この言葉は、过去時代の女房の言葉です。“お”は、Prefixです。これは敬意を表す言葉です。言い換えに、“うまい”はより合理的な言葉であり、男性はより合理的な言葉を使用することを好むため、この言葉は男性の言葉と考えられています。

④じゃね
じゃねの形式は、ではない
 Generally, long syllable word is more polite than short one. So じゃね is vernacular word of じゃない

Secondly, we focused about why women’s speech is more polite and correct than men’s speech. There are 3 reasons for this; 1. Conservative, 2. Hierarchy, 3. Appearance. Next, we will explain each reasons.

1. Conservative
Women are considered to be more conservative than men in linguistics. It relate that they are in middle class, the society expect to women behave better than men. Also, they become to use more polite and correct language as they growing because they would like to be a model of speaking for their children.
In addition, women tend to speak indirectly, so women’s speech sounds more polite than men’s speech.

2. Hierarchy
Historically, women should use polite speech for some reason.
For example, women have less power than men so women are in low status. Because of it women have to be polite than men so they use polite speech not vernacular. We get use to that situation that women use polite speech naturally.

3. Appearance
Women are judged by their appearance, and the appearance includes how they speak. The society, people around them expect to women behave better than men since they are child. So they become to use more polite and correct language.
[Conclusion]
People tend to be shocked when something change especially good to bad.

[Bibliography]
Holmes, J. (2013) An introduction to sociolinguistics (Fourth ed.) Ney York; Routlege
Deborah Tannen, Ph. D. (2001) Talking from 9 to 5: Women and Men at Work
APPENDIX F

QUESTIONS FOR INTERVIEWS WITH STUDENTS IN FOCAL GROUPS

The first interview
1. Could you describe the process in which you wrote your proposal for the sociolinguistic research project?
2. What was difficult in the process of writing the proposal?

The second interview
3. Could you describe the process in which you revised your proposal for the sociolinguistic research project?
4. What was difficult in the process of revising the proposal?

The third interview
5. Could you describe the process in which you prepared for the oral presentation?
6. What was difficult in the process of preparing for the oral presentation?
7. How do you feel about your oral presentation? What do you think you did well? What do you think you should or could have done better?
8. Could you describe the process in which you wrote the final report?
9. What was difficult in the process of writing the final report?
10. How do you feel about your written final report? What do you think you did well? What do you think you should or could have done better?
APPENDIX G

QUESTIONS FOR INTERVIEWS WITH THE TEACHER

The first interview
1. Could you describe your prior experience in teaching sociolinguistics?
2. Is there anything you changed in the design of the sociolinguistics course after teaching it in the fall semester of 2014?
3. How would you describe purposes of the proposal writing assignments?
4. What were your reactions to the students’ original research proposals?
5. What were your reactions to the students’ revised research proposals?

The second interview
6. How would you describe purposes of the oral presentation of the sociolinguistic research project?
7. What were your reactions to the students’ oral presentations?
8. How would you describe purposes of the final written report of the sociolinguistic research project?
9. What were your reactions to the students’ final written reports?
APPENDIX H

TRANSCRIPTION CONVENTIONS

(Adapted from Atkinson, 2011, p. 163)

, Nonfinal/continuing intonation followed by short pause
. Final/falling intonation followed by pause
? Final/rising intonation followed by pause
: Phoneme lengthening
(() Nonlinguistic event descriptions
() Transcriber doubt (parentheses can be filled or unfilled)
(0.6) Pauses timed in tenths of a second
(.) Short untimed pauses
= “Latching,” i.e., the second speaker’s turn begins without pause after
the first speaker’s
[ Overlapping of one speaker’s talk by another’s
>No< Diamond brackets enclose talk which is faster than surrounding talk
<No> Diamond brackets enclose talk which is slower than surrounding talk
°No° Degree signs enclose talk that is quieter than surrounding talk
No Underlining marks various kinds of “voice quality,” such as emphasis
and stress
CAPITAL LETTERS Notably high volume
Italic Japanese-English translation